



FRIDAY, JUNE 13, 1879.

Contributions.

Fast Freight Trains by the Blue Mountain Line.

TO THE EDITOR OF THE RAILROAD GAZETTE:

My attention has been called to an article in your issue of May 23, 1879, headed "A Southern Fast Freight Train."

In this it is claimed that a special fast train was arranged to be run between Lynchburg and New Orleans in the interest of Lynchburg tobacco dealers, on May 1, and the schedule given via the Crescent or Alabama Great Southern Line. In justice to our Blue Mountain Line, I make the following statement of facts:

In anticipation of the great move of tobacco from Virginia Cities to New Orleans and the Southwest, after the reduction in tax May 1, a regular freight schedule was arranged via our Blue Mountain Line, and is now being run, making the time between Lynchburg and New Orleans five and a half days, and from Richmond and Danville, Va., six and a half days. This was found to be satisfactory to our patrons in Richmond, Danville and Lynchburg; but two days previous to May 1 a special tobacco train was advertised to leave Richmond via the Piedmont Air Line, May 1, 9 p. m., and to arrive in New Orleans May 5, 5 a. m., time, three and a half days. To meet this, and to protect our shippers from delay as against other lines, it was arranged by the Richmond & Petersburg Railroad, Virginia & Tennessee Air Line and Blue Mountain Line to run a special train, to start from Richmond, not Lynchburg, to leave Richmond evening of May 1 and arrive in New Orleans morning of May 5.

The following is the schedule run:

Left Richmond, Va., by R. & P. R. R. 10:30 p. m., May 1.
 " Petersburg, Va., by A. M. & O. R. R. 12:00 night
 " Lynchburg, Va., by A. M. & O. R. R. 9:00 a. m., May 2.
 " Bristol, Tenn., by E. T. & Ga. R. R. 12:00 night
 " Dalton, Ga., by S. R. & D. R. R. 4:00 p. m., May 3.
 " Calera, Ala., by S. & N. 12:00 night
 " Montgomery, Ala., by M. & M. 5:10 a. m., May 4.
 " Mobile, Ala., by N. O. & M. 6:00 p. m.
 Arrived New Orleans by N. O. & M. 5:30 a. m., May 5.

Seventy-nine hours, Richmond to New Orleans, including all stoppages, three days ahead of any other line. Taking on at Lynchburg, May 2, 9:00 a. m., such shipments for Mobile and New Orleans as were not forwarded the day before at 6:00 p. m., and also the tobacco which left Danville, May 1, 7:00 p. m. This tobacco reached New Orleans, and was in store ready for the morning sales, early Monday morning, and at the same time with the tobacco from Lynchburg May 1, 6:00 p. m.; thus showing our Blue Mountain Line a successful competitor over all other lines in this race for time from all the Virginia cities to New Orleans and the Southwest. The time made by our road, the Selma, Rome & Dalton, from Dalton to Calera, 174 miles, was eight hours, being the fastest time made by any road in the line. This train ran on regular schedule time from Montgomery to New Orleans, which schedule is being run every day.

JNO. M. WYLY,

General Southern Agent Selma, Rome & Dalton R. R.

"Counter Pressure" as Applied to Locomotives.

TO THE EDITOR OF THE RAILROAD GAZETTE:

Since the first locomotive was built, it has been the study of inventors and many practical machinists to utilize and apply the steam-power of their boilers for the purpose of checking or stopping trains and to obtain if possible as much resistance to hold a train on a down-grade as it could furnish power to draw it up the same grade.

A large amount of money has been expended in experiments to reach these results, and to secure a "counter pressure" in the cylinders that could be used without danger or breakage of machinery, and with but very little extra work for the engine-driver.

The nearest approach to such a result was effected by a party of accomplished engineers and machinists in Belgium, a few years ago.

The plan was to inject a given quantity of water into the cylinders while in a heated condition, and such a quantity only as would be instantly converted into steam. But few pounds of "counter-pressure" were realized from their experiments, however; yet upward of one thousand locomotives were reconstructed on that plan in Belgium alone. Subsequently experimenting has been the rule, relative to the same ends, here and elsewhere, but no appreciable advances have been made until quite recently. As improved machinery adapted to railroading renders heavy grades less objectionable, parties in this country have been led to persevere in the study of a feasible method that might obviate still more the difficulties of steep inclines—especially in the matter of holding trains loaded or otherwise while descending them. And at last the writer is gratified to report on authentic information the accomplishment of their purpose.

It is not the writer's aim at this time to present in detail all the parts and peculiarities of this wonderful invention, but simply to allude to some of its chief features.

The plan is to apply and use the steam in the cylinders in such manner as to be able to appropriate all the boiler power, be it one or one hundred pounds pressure, for the purpose of holding a train of cars on a down grade, with or without brakes, and to help check more suddenly a train in danger of collision or any accident imminent ahead.

Not satisfied with the partial tests made with working

models, and more completely to demonstrate the usefulness of the invention, the parties interested very recently entered into an arrangement with the Delaware, Lackawanna & Western Railroad Company to apply the device to one of its engines. This was done under the immediate supervision of Mr. W. G. Oakman, a Division Superintendent of that road (head-quarters at Utica, N. Y.), and his Master Mechanic, Mr. Thomas Thatcher. From them has been elicited the following facts:

While running down grades, the engine can be made to hold back a heavier train than it can haul up the same grade, and this with perfect ease and safety to the engine. The retarding power, or "counter-pressure," may be applied instantly or gradually, at the will of the engineer in charge, and in any amount he chooses, up to the maximum pressure of steam in the boiler; and this without strain on the boiler or flues. From the indicator test of the cylinders, the fact was evidenced that while ascending and descending grades of 85 feet to the mile, as great if not a greater power was obtained in the cylinders to resist on the down grade as to haul up the grade. And besides, the cylinders are kept constantly lubricated by steam while making the down grades. Then again there is a complete avoidance of cinders and dirt making their way through the exhaust-ports into them, as is frequently the case with the ordinary engine while in motion and not taking steam. To accomplish no more than this is of no little importance.

A trial trip made under the direction of the gentleman named was highly satisfactory. It consisted in hauling by the engine in question of a train of loaded cars equal to its full capacity up a ten-mile grade of 60 to 90 ft. to the mile, and taking the same train with additional cars back to the starting ground, and this without the use of a brake.

No stronger proof of the utility and practical bearings of this invention could be produced; neither is there any needed. Coupled with the fact of simply holding back a train on a down-grade is the significant one of bringing trains to a full stop at stations, which is all effected by the simple operating of a valve that is easily made to respond to the wish of the engineer.

The idea is not to be entertained, however, that the several brake systems now in use are to be, or are likely to be, entirely superseded by this invention, as all the known devices in the world for stopping trains, if not too cumbersome and difficult of operation, need to be applied to all trains, and especially passenger, as a precautionary step for safety.

It is confidently believed, by many practical railroad men who have given the matter their attention, that this new power given to locomotives will in the near future entirely revolutionize their construction and accomplish for railroads a desideratum of safety never before reached.

WATERVILLE, N. Y.

F. H. TERRY.

State Railroad Commissioners' Reports.

TO THE EDITOR OF THE RAILROAD GAZETTE:

The controversies on the question of "uniformity of accounts" in the returns to the railroad commissioners of the respective states and the articles on the various systems that have been suggested were read with much interest by the writer.

There exists apparently a great diversity of opinion with reference to the amount and nature of the information to be given by the railroad companies, and as great a diversity in the particular order or system in which this information is to be reported.

A uniformity is unquestionably very desirable, but the first question that presents itself in connection therewith is with reference to the object in view. If nothing further is aimed at than a mere consecutive order or arrangement of the questions to be answered by the companies, Mr. Kirkman's form in your issue of May 30 would meet every requirement.

If there exists a desire with the commissioners to become better informed on the relations between charge and cost and other details of the great properties placed under their supervision, permit me to suggest to them the adoption of Mr. Pink's system, which will afford the student of railroad economy all the information requisite on this subject. Do they object because of the details called for in this system? Let me then direct their attention to the report of the Massachusetts Commissioners, the most able state document published in this country on the subject of its railways. As yet none of the systems proposed possess the same merit, and would it be reasonable to expect that state to discard their system, the result of much labor and research, which has been successful and is understood by the companies, for something differing materially, and inferior to it?

Comparing Mr. Towne's proposed system with that in operation at present in the Massachusetts board, it will be found to be in the main the latter abbreviated, and the questions to be answered arranged in a different order. It is, however, not sufficiently abbreviated to meet the approval of the advocates of brevity in returns, and condensed too much to furnish results by means of which comparisons of revenue and cost of operating can be satisfactorily made. The admirer of natural and consecutive order will be unfavorably impressed by the irrelevancy of the details of the expenses to the groups to which they are assigned; for instance, under expenses of the "Car Department" is charged the item of "Train-Men"—an item which any car department would decidedly object to be burdened with. And, similarly, expenses coming within the province of nearly every department are embraced in one group.

The result is a system not only too complicated as an initiatory measure, but also greatly at variance with the general style of the present order of reports, so that the com-

panies will in most instances retain their particular system, and hence it is to be apprehended that they will treat this system with such indifference that the results will be little less than an array of meaningless figures.

There is a distribution and assignment of the duties and responsibilities in conducting the business of a railway that has become so generally adopted that it has been a problem to the writer why a similar distribution of the operating expenses had not suggested itself to the commissioners. Take the modern organization of a railway; its business is managed:

1st. By a "Transportation Department," in charge of a superintendent of transportation, assisted by general freight and passenger agents, who are intrusted with all that pertains to the securing, handling and forwarding of passengers and freight.

2d. A "Motive Power Department," in charge of a superintendent of motive power, or master mechanic, who is charged with all that pertains to the efficient condition of the engines and cars and the moving of the same.

3d. A "Maintenance of Way Department," in charge of an engineer or road-master, responsible for everything that pertains to the maintenance of the roadway, its bridges, etc., in good and efficient order.

4th. An "Executive Department," comprising the President and other general officers and expenses pertaining to the general management. Here we have four departments, for the efficient and economical operation whereof these respective heads are held to account; and how felicitously are the expenses incurred in each department expressed by the following heads: "Conducting Transportation," representing the expenses under the officers of the transportation department; "Motive Power" and "Maintenance of Cars," the expenses incurred under the supervision of the master mechanic; "Maintenance of Way," all expenses of the road department under the jurisdiction of the engineer or road-master, and, lastly, "General Expenses," the expenses of the general management and any expenses not pertinent to any of the preceding departments.

Such a system has been for a number of years in operation on the Pennsylvania Railroad and its system of lines, which of itself is guarantee of its efficiency; but its excellence has become so manifest that its principles and main features are now incorporated in the organizations of a number of roads.

The writer does not wish to be understood as favoring the adoption of this system with all its details under the general heads named, but he believes it practicable to apportion the expenses appropriately under some four or five sub-headings under each of the general heads; this, together with the train, engine and car mileage, are the essential points, and with these very satisfactory results in comparisons can be reached.

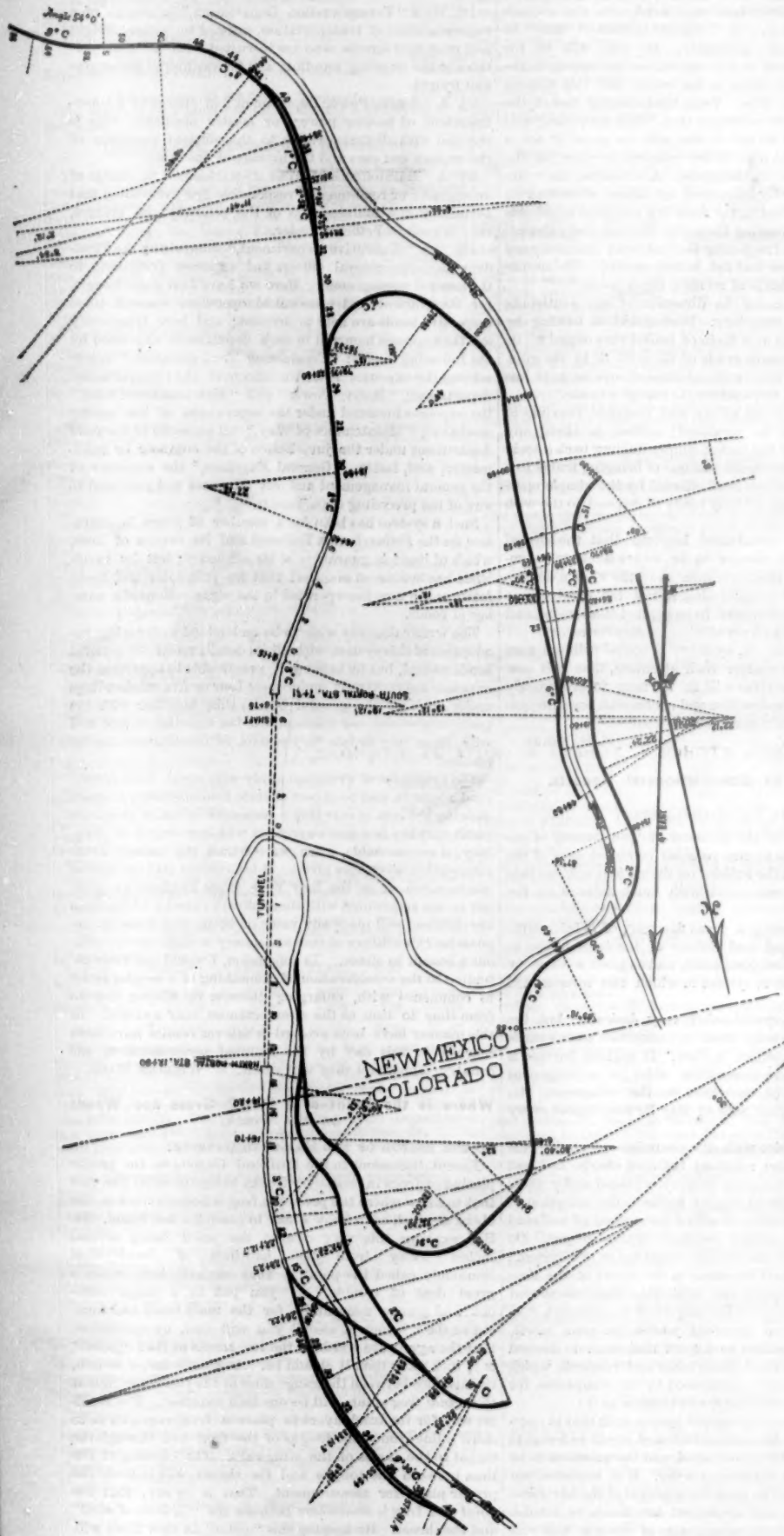
The principles of evolution apply with equal force to railroad accounts, and to expect of state commissioners a report showing the cost of carrying a passenger or ton of freight, a result that but few roads arrive at with any degree of accuracy, is unreasonable, when we contrast the nature of the information heretofore given. It is admitted that the figures can be given, as in the New York State Engineer's report, but no one acquainted with the arbitrary rules by which they are obtained will place any value on them, and hence it imposes an expenditure of time and money on both parties without a benefit to either. In conclusion, I would call their attention to the consideration of something of a simpler order to commence with, enlarging thereon or adding thereto from time to time as the circumstances may warrant. In this manner have been evolved whatever results have been reached to this day by the railroad accountants of the country, which fact they will admit. WILLIAM MAHL.

Where is the Point of a Frog?—Grass and Weeds on the Track.

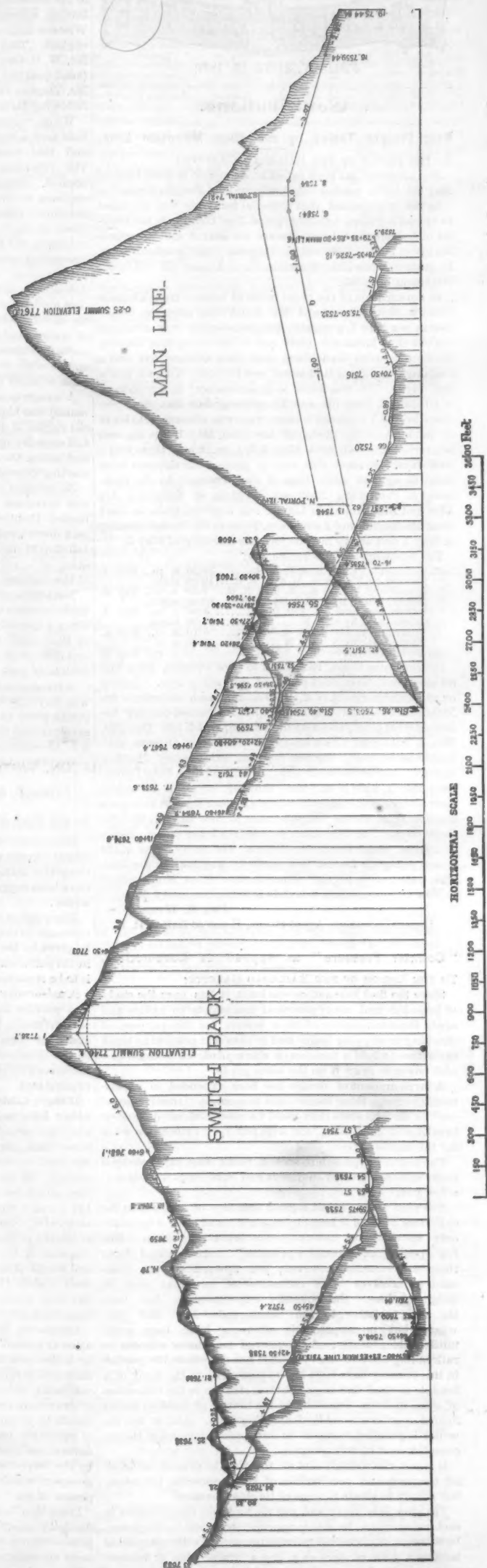
TO THE EDITOR OF THE RAILROAD GAZETTE:

Recent discussions in the Railroad Gazette on the proper placing of frogs in cross-over tracks brings to mind the fact that to know where the point of a frog is bothers track-layers about as much as to know where to place it when found. Mr. Bell explains this very clearly, the point being several inches away from the half-inch of hard steel commonly called the point. That one-half inch causes a great deal of trouble. If you put in a single turnout and gauge accurately for the main track and turnout at the "½ inch of steel," you will find, by measuring, that the aggregate width of the two tracks at that "point" is ½ inch more than it should be. At a three-throw switch, the distance between the gauge sides of the two outer rails at the actual frog points will be one inch too great. The readiest way for the tracklayers to place a frog correctly is to draw a line around the tongue of the frog and through the throat to the angles of the wing-rails. The crossing of the lines between the tongue and the throat will indicate the proper place for measurement. That is to say, that the point of a frog is somewhere between the "½ inch of steel" and the throat. By keeping this "point" in view there will be no difficulty in lining frogs in a satisfactory manner.

Now is a good time to do something to prevent the growth of grass and weeds on railroad tracks. The grass and weeds that grow up between the rails and for a space of three or four feet outside the rails are a source of a great deal of trouble to the track-men and expense to the company. The digging of them up and removing them by mechanical means is too expensive for most companies to stand, and there are other ways that might be adopted to stop the growth, the expense of which is so low that any railroad company may keep its tracks clear at a nominal cost. Brine or alkali will kill the seed of all noxious weeds and grasses that interfere



PLAN OF RATON TUNNEL AND SWITCHBACK ON ATCHISON, TOPEKA & SANTA FE RAILROAD.



PROFILE OF RATON TUNNEL AND SWITCHBACK,

with track repairs or bespatter the locomotive with dew and dust collected from a rank growth of this common trash.

Some ingenious mechanics might provide apparatus for saturating road-beds with brine or alkali that would effectually kill all seeds of anything that will bother track-men and locomotive runners. Some thousands of dollars are expended every year for getting rid of this nuisance, and a "sprinkler" properly arranged would not only kill the weeds, but render wooden bridges, culverts, etc., fire-proof. Will some of our ingenious men think this matter over? Track that is frequently surfaced is not troubled with grass and weeds; but there are thousands of miles of roads in this country that are not disturbed by the track-man's shovel, and consequently the road looks like a pasture in full growth.

It would seem that any railroad company that does not

listened. This man wasn't like any engineer I had ever made friends with before. He was an awfully practical fellow. The passenger said:

"Yours is a very exciting life?"

"Is it?" said the engineer, with an air of interest.

"Well," said the passenger, quieted a little bit, "I meant, isn't it?"

"Oh," was the reply, with a satisfied accent. Then, after a pause, "Well, I don't know; do you see anything very exciting about this?"

He was lazily stretched out on his cushion, dividing up his paper of fine cut, putting all but one "chew" of it into his vest pocket, and putting the one "chew" into his tobacco-pouch, so that he could show the fireman that this was all he had, when that useful official should ask for it.

The passenger fidgetted a little, but didn't seem to want to give it up. I didn't know how to feel glad enough that I hadn't gone into the catechism business with the quiet man.

"Tain't mine," replied the sphinx, "it belongs to the company."

"How much can you get out of her?" asked the passenger. The engineer looked surprised. "Can't get a cent out of it," he said; "can't get anything out of anybody except the paymaster."

"Well, but I mean," persisted the passenger, "what can she do, on a good road, easy grade, and you cracking on every pound of steam she can carry?"

"It can pull the train," he said; "what would you expect it to do?"

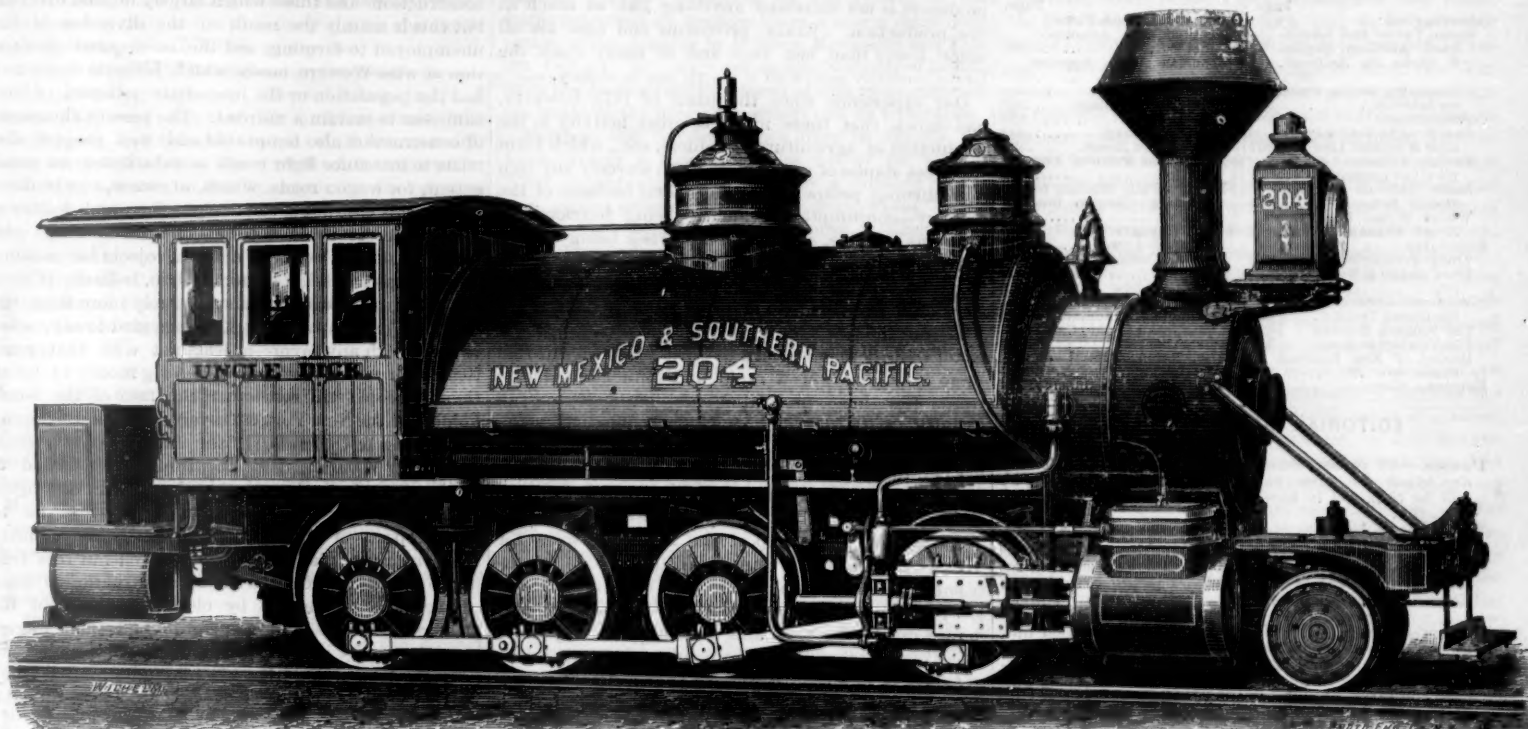
"Well, but how fast?"

"Schedule time," was the reply, "that's all we're allowed to make; must make our time between all stations. That's imperative orders on the Indianapolis, Bloomington & Western."

"Well, but couldn't you pull her wide open and—"

"Pull who wide open?"

"Why her; your engine, and give her sand and—"



LOCOMOTIVE FOR THE RATON SWITCHBACK, ATCHISON, TOPEKA & SANTA FE RAILROAD.

By the Baldwin Locomotive Works, Philadelphia.

disturb its road-bed often enough to prevent a rank growth of trash, would be willing to pay a fair price for a "patent weed-killer."

Any one wishing further ideas respecting this matter will please address Wm. S. HUNTINGTON, Bancroft, Mich.

The Raton Switchback and Tunnel.

The map, profile and cross-sections herewith represent the "switchback" and tunnel over and through the Raton Mountains on the line of the Atchison, Topeka & Santa Fe Railroad. The location, it will be seen from the map, is almost directly at the line between New Mexico and Colorado, the boundary line being only a few feet beyond the north portal of the tunnel.

The "switchback" or zig-zag line was located over the mountains to facilitate the construction of the line before the tunnel could be completed. The map shows the location very clearly, and the profile the grades. The line over the mountains is 2½ miles long, and has maximum grades of 6 per cent. (316.8 feet per mile), with curves of 350 feet radius. This temporary track was at first operated with locomotives of the ordinary American type, with 17 x 24 in. cylinders; but during the past year a Consolidation tank engine was built for the line by the Baldwin Locomotive Works. This engine has been the subject of innumerable newspaper paragraphs, and as it has excited considerable interest, we give an engraving of it, of which the builders write:

"The 'Uncle Dick,' built by us for the New Mexico & Southern Pacific Railroad, has cylinders 20 x 26 in. and driving-wheels 42 in. diameter, and is of the 'Consolidation' type, with a 1,300-gallon tank on the boiler, and has also a separate tender attached. We were not able to weigh the engine in complete working order here, and can only estimate its weight. As, however, the Consolidation locomotive with 20 x 24 in. cylinders and 4-ft. drivers, as we ordinarily build it, weighs 102,000 lbs. in working order, we estimate the weight of the 'Uncle Dick,' which has a boiler 2 in. greater in diameter than the ordinary Consolidation engine, including water in tank, at 115,000 lbs. There would be about 15,000 lbs. on the truck and about 25,000 lbs. on each driving-axle, say 12,500 lbs. on each wheel. This is the largest locomotive which we have thus far built, but we do not suppose it is the largest in the world. This engine has hauled 9 loaded cars besides its tender up a grade of 317 ft. per mile."

The engravings leave very little to be said of this interesting work, as all the particulars not given above are shown in the illustrations.

The Practical Engineer.

But before I could get to this engineer I was speaking of, who had a passenger engine on the Indianapolis, Bloomington & Western, another had already engaged him in conversation. I am always willing to let anybody else make a fool of himself and ask the questions, just so I get the benefit of the answers, so I let him talk while I hung around and

listened. This man wasn't like any engineer I had ever made friends with before. He was an awfully practical fellow. The passenger said:

"Full what out?" asked the engineer.

"Why, the train."

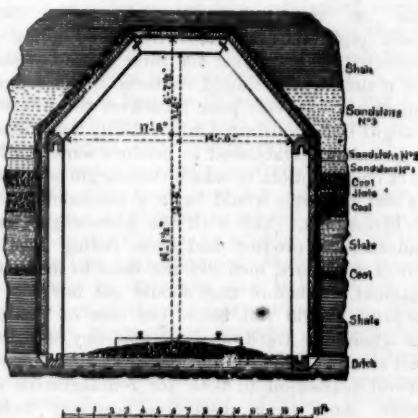
"Train isn't in anything. Train's all right."

"Well," said the passenger, "I mean, are we nearly ready to go?"

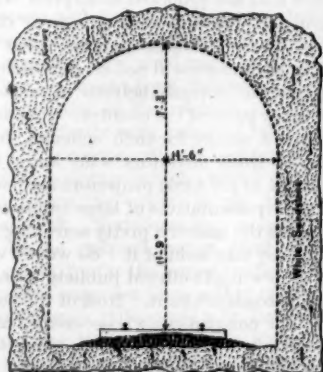
"I am," quietly replied the engineer, "are you?"

"You have a splendid engine there," said the passenger.

North Portal Section.



South Portal Section.



RATON TUNNEL PORTALS.

"Why should I give her sand?"

"To make her run faster."

"Sand does not increase the speed of an engine, steam is the only motive power."

"But you give her sand on a heavy grade, and—"

"Excuse me, I never give an engine sand. The sand is poured on the rail."

"Oh, well, you know what I mean. You give her steam, you know, and—"

"No," he said, "I do not; I merely move the throttle lever, thus opening the regulator valve, and the steam is introduced to the proper portions of the machinery in simple obedience to the laws of physics. I have no control over it beyond regulating the supply."

"Did you ever," said the despairing passenger, "come so near a collision that you had to throw her clear over and—"

"No," the man said very gravely, "and I never expect to. It couldn't be done. No man could throw this engine clear over. It weighs 85 tons."

"I suppose," the passenger obstinately replied, "that when you start out with a heavy train you have to hold her awfully close to the rails?"

"I have nothing to do with that," he said, "the laws of gravitation and friction control all that. I presume my weight on the engine adds somewhat to its pressure on the rail, although of course that amounts to very little in comparison with the weight of the engine."

The passenger wiped the beaded perspiration from his brow. "Well," said he, "how do you like life on the foot-board, anyhow?"

"I don't live on the foot-board," the engineer said, "I live at home."

"Well, how do you like running on the road, then?"

"I don't run; I ride."

The conductor came along just here and handed the man in the cab a bit of yellow paper and then shouted "All aboard." The passenger, with a grateful expression of countenance, said "Thank heaven!" as he went back and climbed on the rear platform of the last car, as far away from the engine as he could get, and I heard the engineer, as I turned away, growling about people who "always wanted to talk shop."

It was a terribly narrow escape for me, but I made it, and rather enjoyed it. Providence always does take care of the truly good.—Correspondence Burlington Hawkeye.

A Steam Car for Local Travel.

There has recently been turned out from the Central Pacific shops in this city a new dummy car, in which the locomotive, mail, baggage and passenger compartments are combined. The car will be used on the Northern Railway and will run between Woodland and Williams. It is of very neat and compact design, as ornamental in appearance as an ordinary passenger coach, and will do away with the use of an engine and numerous cars which have heretofore had to be run between those places. The total length of the car is 61 ft., including the platforms. In front is a small engine with an 8 x 14 in. cylinder, two drivers, each 42 in. in diameter, and a coal box. Next to this is an apartment for the baggage and mail and then comes the section to be used by the passengers. Thirty persons can be comfortably seated in this apartment. Underneath the baggage compartment is the water-tank, and the car is provided with the Westinghouse air brakes. The work inside and out has been finely finished and presents a very neat appearance.—Sacramento (Cal.) Bee.



Published Every Friday.

CONDUCTED BY

S. WRIGHT DUNNING AND M. N. FORNEY.

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EDITORIAL ANNOUNCEMENTS.

Passes.—All persons connected with this paper are forbidden to ask for passes under any circumstances, and we will be thankful to have any act of the kind reported to this office.

Addresses.—Business letters should be addressed and drafts made payable to THE RAILROAD GAZETTE. Communications for the attention of the Editors should be addressed EDITOR RAILROAD GAZETTE.

Advertisements.—We wish it distinctly understood that we will entertain no proposition to publish anything in this journal for pay, EXCEPT IN THE ADVERTISING COLUMNS. We give in our editorial columns OUR OWN opinions, and those only, and in our news columns present only such matter as we consider interesting and important to our readers. Those who wish to recommend their inventions, machinery, supplies, financial schemes, etc., to our readers can do so fully in our advertising columns, but it is useless to ask us to recommend them editorially, either for money or in consideration of advertising patronage.

Contributions.—Subscribers and others will materially assist us in making our news accurate and complete if they will send us early information of events which take place under their observation, such as changes in railroad officers, organizations and changes of companies, the letting, progress and completion of contracts for new works or important improvements of old ones, experiments in the construction of roads and machinery and in their management, particularly as to the business of railroads, and suggestions as to its improvement. Discussions of subjects pertaining to ALL DEPARTMENTS of railroad business by men practically acquainted with them are especially desired. Officers will oblige us by forwarding early copies of notices of meetings, elections, appointments, and especially annual reports, some notice of all of which will be published.

TRAFFIC PROSPECTS.

In nearly every one of the great staples of production of this country whose movement is reported, a larger business is reported this year than last, though in some of them last year's business was the heaviest ever known. We have weekly or monthly reports of the movement of grain at the chief markets, of hogs and hog products, of cotton, of petroleum, of anthracite coal and of the chief bituminous production of Pennsylvania and Maryland. The grain movement of 1878 was so very much larger than any that had preceded it that it was hardly hoped that the next year's business would equal it; but as we are now approaching the close of the crop year, it appears that the amount marketed from the crop of 1878 will somewhat exceed that from the crop of 1877. Of course the business of the second half of the year must depend chiefly on the coming harvests, of which very little can be prophesied except that the area in cultivation is certainly considerably larger than last year, and the average condition at this time not so good, it being almost perfect in June last year, even in Minnesota and vicinity, where, after all, it turned out a failure. The movement of hog products, which affords so large a traffic to many railroads, is also larger than last year, when it was much larger than ever before. Last year's cotton crop is now mostly marketed, and fulfills the estimate that it would be the largest ever known. Petroleum, which showed a decrease in 1878 compared with 1877, is this year produced in larger quantities than in the latter year even, and the exports are about the same as then and very much larger than last year or any other year except 1877. The comparison of the production of anthracite coal in the two years is likely to give an exaggerated idea of the business of this year. It is a large business, but the vast increase over

the production of 1878 is chiefly due to the fact that that year's business was an exceptionally small one. The bituminous production that is reported (which is only a small part of the whole, though most of the Eastern production) is well maintained, in spite of the increase in anthracite production. The lumber shipments from Chicago, which are largely determined by the amount of immigration and the prosperity of the farmers, for the first five months of this year have been 30 per cent. greater than in 1878 and about 50 per cent. greater than in either of the two previous years.

Prices of all these staples of production, however, are extremely low, and the purchasing power of the producers is not increased anything like as much as the production. Grain, provisions and coal are all much lower than last year, and in many cases the larger quantity produced is worth less in money.

Our experience since the panic of 1873, however, has shown that there might be great activity in the production of agricultural products, etc., which form the great staples of our exports, with scarcely any sign of returning prosperity in the general business of the country—consumption evidently being restricted as much as possible, and new enterprises being almost universally avoided. Either there seemed to be no employment for capital, or capital was too distrustful of the stability of things to take any risks.

Within the past year a great change is manifest. It is not that there is a return to great prosperity or that there is any sign of a rapid and immediate change from the long prostration of business to full activity, with the demand exceeding the supply and large profits on everything. But there has certainly been a general and a considerable improvement in nearly all manufacturing industries. Every one seems to be employed, most of the works are busy, and many report the largest business for years. Generally it is complained that profits are extremely small, and wages, for this country, are very low; but there are more orders for the factories and more work for the men, and generally not only have prices ceased to go down, but no one any longer seems to expect or fear that they will go down; and this has an effect on capitalists which often makes a revolution in their conduct. So long as prices were going down from year to year, and almost from month to month, no one felt safe in buying any fixed property or in investing in any new enterprise for producing anything. You might urge that the house you were offering for \$10,000 cost \$15,000 once, and still commands \$900 rent, which would be a good return on the investment; but your customer would reply that the rent had been going down a hundred dollars a year for three or four years past, and if that decline should continue much longer, the rent would be a very poor return on the \$10,000. So it might be demonstrated satisfactorily that a manufactory could be established to produce some staple article of consumption, in which the margin between present cost and price would leave a handsome profit on the investment. Yet with the knowledge that the manufactured product had been falling in price for four or five years, men did not dare to make the investment, lest before they should get fairly at work the price should fall below the cost of production. But when once the downward tendency of prices has been arrested, then capital manifests something of its natural disposition to seek for remunerative investments. And this is observable now very distinctly. Capital is still cautious, as it has good reason to be, and as it is hoped that it will continue to be, but give good evidence that the proposed enterprise will yield a good return, and you will not have great difficulty in getting the money, though perhaps your idea of "evidence" in such cases will not be convincing.

We see this in the increased activity in railroad construction in many parts of the country. It is no longer possible to borrow money for such schemes from the great public of small investors who know nothing about them; and so per force projectors are compelled to resort to the representatives of large capitalists, who are likely to give the matter a pretty searching investigation before they take hold of it. So we see very few or no bonds of new roads offered publicly to investors, though so many roads are built. Most of the new roads are built by old companies, whose credit, after the ordeal they have just passed through, makes it easy to get money, because this very credit is the fruit of demonstrated integrity in management and good judgment in taking advantage of the proper time and place in making branches and extensions. Many others, however, are not built by new companies, and these have frequently to secure a large part of the money for their construction in districts where they are built, and give what we may call original proof of their value before they can secure the necessary capital. One of the results is an unusually heavy demand for rails. Not only

are the steel mills full of orders for months ahead, but the demand for iron, which is most used for new roads, is the largest for years, so much so that there has been a decided advance in price. Many of the works which manufacture other railroad material and supplies also report a great activity in business recently, some having difficulty in supplying orders. Our weekly record shows that so far this year the mileage completed has been much greater than before since 1873, though the winter was much less favorable for construction than last year. It might seem strange that one of the first industries to show signs of revival should be railroad construction and those which largely depend upon it; but this is mainly the result of the diversion of the unemployed to farming, and the consequent occupation of wild Western lands which hitherto have not had the population or the immediate prospect of one sufficient to sustain a railroad. The present cheapness of construction also tempts old and well peopled districts to introduce light roads as substitutes, to some extent, for wagon roads, which, of course, can be done when roads cost but seven or eight thousand dollars a mile where it could not be done when they cost twenty thousand dollars a mile. Projects for making new "great trunk lines," across Ohio, Indiana, Illinois and other states where roads are rarely more than ten or fifteen miles apart do not, we are glad to say, seem to meet with any favor—at least not with that practical favor which results in supplying money to build them. People still remember the fate of the bondholders of the New York & Oswego Midland, the Rome, Watertown & Ogdensburg, the Indianapolis, Bloomington & Western, the Rockford, Rock Island & St. Louis, and all that long and painful catalogue. Perhaps there is too sanguine a view as to the prospects of getting a profitable traffic immediately from new roads in new country; but this feeling so far has not resulted in any construction to speak of except as extensions by old companies, and the managers of these old companies had their fingers burned so badly in 1873 and before by taking up such projects too quickly that we may be sure that they will act with due deliberation, and see where the traffic is coming from before they build the roads.

Roads of either of these kinds—light, cheap local roads to take the place of highways, and extensions of border roads to serve new districts now filling up with settlers—are welcome additions to our system and will prove substantial aids to the national prosperity.

The improvement in manufacturing industry is likely to affect favorably many lines which have profited very little by the large movement of agricultural produce that we have had several times since 1873. Indeed, on the whole, there has been a constant growth in agricultural production; and yet in some of the years in which they have carried most the roads east of the Mississippi and Chicago have had extremely unsatisfactory profits. The farmers had very small profits and bought very little, and this made light work for manufactories, light shipments westward, light passenger traffic and light local freight traffic. Now it does now seem probable that any very large profits can ever be made on the through east-bound traffic, however large it may be (and it is the chief freight traffic of the country), in all that territory in which rates are based on the New York-Chicago rates—practically everywhere north of the Potomac and the Ohio and east of the Mississippi as far north as Burlington and south of the line thence to Chicago and Milwaukee. The great staples of this country and the territory further west must always, under all circumstances, be carried to the Eastern seaports or Eastern consumers at very low rates. All the efforts of the railroad companies will only enable them to avoid ever carrying at a loss and generally to secure a small profit—in the aggregate doubtless making a large sum, but affording to most railroads only a small part of the yearly net income necessary to support them. Activity in local industries, prosperity among the farmers and larger consumption of manufactured goods by them, will do more to support the railroads than ever so great a development of grain and pork production effected with very little increase of population and no increase of profit. For some time east-bound freight traffic has gone on increasing while west-bound was almost stationary. Not only was it necessary to carry Kansas and Nebraska corn and wheat to New York for about the bare cost, but the cost has been enhanced by the fact that there was absolutely nothing to give the cars return loads to which brought the increase in production to the East. This year there has been a change. So far we understand that the shipments westward from New York have been nine or ten per cent. greater than last year. This, with the improvement in manufacturing industry and the consequent increase in the local business,

are better indications of prosperity to the railroads than any increase in grain or provision movement would be.

The revival in manufacturing industries and also in railroad construction is, however, doubtless the result of the great agricultural production of the past two years. The great crops of 1877 and the emigration to the West which followed seem first to have arrested the downward tendency; while the great crops of 1878 and the further impulse which it gave to emigration seems to have fairly turned the tide upward. It is not necessary for it to rise rapidly in order to give us encouragement and confidence, it is only necessary that it should have actually turned and be really rising. Convinced of this, men will make plans for the future and capitalists invest in new enterprises.

Still, at this time, railroad business cannot be said to be generally prosperous. There is a large traffic, it is true, but most of it is of the kind that never yields much profit, and this year much of it has certainly been carried at a loss. The growth of manufacturing industry, however, is hardly shown by the earnings of those roads that report earnings. Scarcely any of the Eastern roads make reports. And it is not likely that such improvement as there has been hitherto has had much effect on earnings as yet. It is rather an indication of future prospects than for its immediate effect that so much attention is given to this movement.

THE CHICAGO & NORTHWESTERN.

At the annual election of directors of this company in Chicago, on the 5th inst., a brief statement of the earnings and expenses for the last fiscal year (ending May 31) was made, by which it appeared that the net earnings, after paying all interest and other fixed charges, had been equivalent to 7 per cent. on the preferred stock, and about 5.1 per cent. on the common stock.

This statement was looked for with interest, because this last fiscal year seemed likely to test the strength of the company severely. It is the chief carrier of spring wheat to Chicago, and one of the two roads through which the wheat shipments of all Wisconsin, Minnesota and Northern Iowa chiefly reach the markets. But a great disaster befell this grain—the chief crop of this territory—just before the harvest last year, and when it promised a larger yield than ever before. The crop of the year before had been an excellent one, and its effect was shown in the earnings of the railroads; but the crop of that year was mostly marketed when this last fiscal year began, which was not profited by it except during the first two months. The question arose whether the road could earn dividends when the chief crop of the country which it serves had failed. This seemed questionable to many, especially as the company has had a rather fluctuating career as a dividend-paying concern—going up years ago to 10 per cent. on both common and preferred, and then passing on both, and paying irregularly since.

The result of the last year is certainly very strong evidence in favor of the future steady profitability of the property. It has suffered greatly from the failure of the wheat crop; and yet it has been able to pay 7 per cent. on the preferred stock and 4 per cent. on the common, and have a considerable surplus.

This leads to the reflection that the Northwestern, though certainly a great wheat road, is by no means a wheat road alone. Consider the territory in which its lines are situated. One extends far to the north, to the shores of Lake Superior, and on a large part of this scarcely any crops are raised for shipment; it is not a farming country at all; but in it are the great iron mines from which furnaces are supplied from St. Louis to Johnstown, Pa., which through the past years of terrible depression in iron manufacture have increased their production, displacing the inferior products of other mines nearer the furnaces in spite of transportation for nearly a thousand miles. The Chicago & Northwestern has 50 locomotives and 3,000 ore cars employed in carrying this ore, although on the most of it the haul is short, from the mines to the lake harbor at Escanaba. Failure of crops does not affect this business, and it was probably more profitable to the Northwestern last year than ever before, as it has a new branch to new mines which then obtained a very large and profitable traffic. Moreover, this same road which carries ore from the mines is the only rail connection with the iron and copper-mining regions of Lake Superior, and as such has a considerable business in carrying supplies to the mines and is their only outlet in winter.

Then, next below the mining district, comes the Green Bay lumber district. Most of the lumber here is carried to lake ports by water, but a very large amount

is shipped by rail to the prairie stations of the Northwestern and the Chicago, Milwaukee & St. Paul while there is a traffic in supplies to the lumber districts similar to that to the Lake Superior mining regions. The Northwestern also has connection with the lumber region on the other side of Wisconsin, near the Mississippi, which largely supplies the prairie country on its and other lines in Minnesota and Northern Iowa. The lumber has to be carried at low rates, especially where it is taken in competition with the lake or river routes, but it is an important freight because it goes to fill grain cars that would otherwise have to be sent back empty. And the prospects for the growth of this traffic are excellent, because there is now a rapid occupation of the country in Western Minnesota and Eastern Dakota which must get its whole supply of lumber from the East—from the shores of the great lakes and the banks of the upper Mississippi and its tributaries.

Further, the Northwestern's lines in Illinois and Iowa—nearly a thousand miles out of its total of 2,200—though supported chiefly by a farming population, cannot properly be called "spring-wheat" roads. Indeed, the country on the 490 miles in Illinois produces little wheat of any kind for market, and not much other grain, having found better work to do, which doubtless affords the railroads, on the whole, more profit than they could get from grain; while on the 497 miles in Iowa, though a great deal of spring wheat is marketed, the agriculture is varied, and much corn and many hogs and cattle are raised, and there are important mines of coal from which the treeless prairies along the road get their chief supplies of fuel. Moreover, on the lines in Illinois, Wisconsin and in Eastern Iowa and Minnesota there are important and growing manufactures, and the population is comparatively dense, with many towns and small cities, not to say such important places as Chicago and Milwaukee.

After all, the hopes of a future improvement of the value of this property must be based chiefly on the occupation and cultivation of the now uncultivated prairies on the lines of this road in Western Iowa and Minnesota and in Eastern Dakota—a growth which has been rapid for three years past, and which has been greatest this year in spite of the failure of the last harvest. We noticed last week how different had been the growth of the country northwest of Chicago from that southwest of it. While Kansas and Southern Nebraska were being occupied and turned into farms, Western Minnesota, hundreds of miles nearer lake navigation, remained comparatively stationary. We will not say that there was not a good reason for it, but it certainly was not that the Minnesota lands were not fertile. It always has been certain that the Minnesota lands and a considerable territory further west would sooner or later be all occupied and mostly cultivated. The emigrants evidently generally preferred the lands further south, but there was not an indefinite supply of these. At this day to get the very cheap lands in Nebraska and Kansas one must go from 700 to 900 miles from lake navigation and cheap water transportation, while in Minnesota and Dakota there is an abundance of excellent quality at half that distance from Lake Michigan or Superior. Apparently the turn of these latter lands has now come. There are not now many extended bodies of good agricultural land left in the hands of the government. The grazing territory is truly immense, but that fitted for making farms is very limited, and one of the largest tracts is this in Western Minnesota and Eastern Dakota, not further west than Western Iowa and Eastern Nebraska, where there is now scarcely any good government land, and little that can be bought from railroads and individuals for less than four or five dollars an acre—much of it, though perfectly wild, bringing twice as much.

Now of course only a comparatively small part of this country which seems at last fairly to have begun to grow is on the lines of the Chicago & Northwestern, actual or projected. But as the railroad system west of Lake Michigan now exists, by far the larger traffic of the whole of it is likely to pass over lines either of the Northwestern or the Chicago, Milwaukee & St. Paul on its way to and from Lake Michigan and the East. These are the trunk lines to the east-and-west roads of Minnesota, whoever may own the latter, and are likely to continue to be unless Duluth should succeed vastly better than it has heretofore in establishing a grain business.

And with the growth of this country the company's land grant in it becomes available. It has more than a million acres in Western Minnesota (to say nothing of vast quantities in Northern Wisconsin for which there is at present little market) which a few years ago could hardly be sold at any price. Now the govern-

ment lands in the alternate sections alongside have mostly been taken up by settlers, and the company is beginning to sell its lands, and their value is sure to grow greater as the population increases.

The Northwestern has had a somewhat eventful history. It is not very long ago that it was a single line 175 miles long; now it spreads out like a fan over the territory from a line due west to one due north of Chicago, and it works about 2,200 miles of road, most of which it owns. At times it has grown with great rapidity, and before 1873 evidently the policy of expansion was followed too eagerly, lines being built before there was any traffic to support them. Just at this time, when it had a great mileage of new roads, the interest on the cost of which had to be provided largely from the profits of the old lines, compelling the reduction or the passing of dividends, came the Wisconsin "granger laws," which threatened at one time to ruin the value of such Wisconsin railroad stocks as had any value. But returning sense modified the Wisconsin laws; a most conservative and careful management devoted its energies particularly to reducing the company's burdens and putting its lines in condition to do their business with the greatest possible economy. Certainly great improvements were made in the condition of the road. Its tracks where traffic is heavy have been nearly all renewed with steel; wooden bridges and culverts have been largely replaced with iron and masonry; the road-bed has been greatly improved, and the condition of the property made such as to reduce materially the expenses for maintenance of way and machinery. While freight traffic was 37½ per cent. greater, and passenger traffic a little greater, in 1877-78 than in 1873-74, working expenses were one-fourth less. And now the time has come again when extensions and branches are desirable to gain new traffic or prevent the diversion of old. A considerable mileage was added last year at a marvelously small cost, and more is begun this year, the work being let directly by the company to the contractors, and costing so little that the average cost of the property per mile of road will be considerably reduced by these additions, which will have their cost provided for by trifling net earnings, and will contribute to the old lines a traffic, much of which will be hauled three or four hundred miles.

The control of this road has changed several times within the past ten years, but sometimes the change in control has not resulted in any noticeable change in the working management, or, as far as could be seen, in the policy of the directory. The frequent changes, however, have not been calculated to win the confidence of investors. And especially the movement by which Jay Gould and his associates secured a representation in the board and the Executive Committee, about two years ago, between two annual elections, frightened many conservative holders of the stock, and millions of dollars worth of shares were sent back to this country from Holland. At the recent election, as had been expected, the Vanderbilt interest was given a representation, three New York Central directors being chosen members of the board. Probably this will be looked upon as significant of greater stability in the management hereafter. Where this interest comes, it usually comes to stay; and though it is not likely that the Vanderbilt party possesses anything like a controlling interest in the company's shares, it does seem probable that the control is now held by men who have bought to hold, expecting an income from their investments, rather than by those who have bought to sell again, who may change the management at any time to serve purposes of speculation.

Western Connections of the Grand Trunk.

The Grand Trunk Railway gets substantial aid towards securing a western connection by the sale of its Rivière du Loup branch to the Dominion government for \$1,500,000 without the rails. The latter are iron, and need renewal, but in this country they would probably be worth \$250,000 simply as old rails.

The sale is a good one, for this line has often not paid the cost of working it, and though the completion of the Intercolonial to a connection with it has largely increased its traffic (it is the sole Western connection of the Intercolonial) the profits still are, and are likely to remain, trifling. The government buys in order to complete its road to Quebec, instead of leaving it as now with its terminus at a little village on the St. Lawrence, and with no source of traffic from the West in its own control. But the chief reason for purchasing seems to have been to aid the Grand Trunk in getting control of a road to Chicago or other Western city. Substantially, by this roundabout way, the Dominion of Canada is to buy or build a road in the United States, not for itself, it is true, but for one of its corporations. This is more generous treatment than American corporations are in the habit

of getting. Imagine the United States buying an unprofitable branch of a Minnesota road on condition that the money should be spent in building a line to Manitoba for the avowed purpose of competing with Canadian roads already built! It is true that the Canadian government does not require in terms that the purchase money should be spent for a railroad to Chicago, the terms being, "That payment of the purchase money shall only be made to cover the expenditure for such purposes in connection with the Grand Trunk Railway as the Government shall consider conducive to the public interest;" but the western connection is what the company wanted the money for and what the Canadian Parliament expects it to be used for.

This gives the Grand Trunk a great advantage over the Great Western. It is now in a measure compelled to get a Western connection and does not so much need the help of the other great Canadian company in securing it. If it can command the Port Huron & Lake Michigan and the old Peninsular, without making further expenditures, the \$1,500,000 will probably pay the whole cost of a new line between Flint and Lansing to unite them and also of the road from Valparaiso, Ind., to the Chicago Southern, which will give an independent entrance into Chicago. If these be made and a new line be built from Toledo to Detroit to connect the Wabash and the Grand Trunk, then some 150 miles of railroad will be constructed, all duplications of existing lines, and adding nothing whatever to the railroad facilities of the country, but serving solely to enable one company to compete with others to better advantage. Indeed, so far as the cost of conducting traffic is concerned, it would be better to throw the money they will cost into the sea, rather than build these roads with it; for it would certainly be cheaper to carry all the traffic on the existing roads than to divide it between them and another. It may be the best thing for the Grand Trunk to do, and it is barely possible that shippers may profit by it; though that is not probable, for when the Grand Trunk gets its road it will want to make something out of it, and it certainly cannot if rates are lower than they have been of late years. But for the community at large such an expenditure is a pure waste, and it is not creditable to our civilization that we have not found some means of preventing such wastes. It will not be so serious in this case, doubtless, as in many others that might be named, but it is peculiarly striking because all the road in the lines described will be directly alongside of existing roads, so that there can be no new facilities worth the mention given for local traffic. The new lines will have no through traffic and no local traffic which they do not take from other roads.

The Niagara Meeting.

The Niagara meeting resulted in an agreement to divide the Chicago east-bound freight on certain definite terms from June 9 till Aug. 1, and to leave the division after that date to the three arbitrators recently appointed. It is not true, however, that the meeting was entirely harmonious and that there was a general disposition to compromise differences. On the contrary, down to near the close of the meeting there seemed no prospect of a settlement. One of the good results of last fall's meeting, which resulted in resolving that Western business should be pooled, has been the reporting of the traffic of each kind carried from Chicago by each road and its distribution among connecting roads until it reached its destination. This history of the course of business, which had been recorded for nearly five months, gave a basis of facts on which to found an apportionment for the future. The Commissioner, Mr. Fink, submitted a division, which was not acceptable to all parties, and apparently nothing would have been effected had not it been suggested to leave the matter to the arbitration of Mr. Wm. Bliss, of the Boston & Albany Railroad.

In a very short time he awarded as follows: 31 per cent. to the Michigan Central, 26 to the Lake Shore, 34 to the Pennsylvania's two lines (Pittsburgh, Fort Wayne & Chicago and Pittsburgh, Cincinnati & St. Louis). When the award was once made, which the companies before had agreed to accept, all parties seemed to be well satisfied, though the same division had been rejected when suggested by the Commissioner for adoption by the companies directly, and without arbitration.

The division differs from that made March 11, 1878, by giving 3 per cent. more of the business to the Pennsylvania's lines (34 per cent. instead of 31), and 1 per cent. of it less to each of the other three roads. The Pennsylvania's lines greatly increased their proportion of the business last winter, and it is on the strength of this that their share was increased. Still this company is said to have been the chief objector to the division when it was proposed for acceptance before the arbitration. The providing of means for carrying out the division was left to a meeting of the general freight agents of the Western roads. Rates were agreed upon, to go into effect last Monday, June 9. They are the lowest agreed rates ever made, being, from Chicago to New York, 15 cents for grain and 20 cents for fourth-class freight. It seems to have been

conceded that grain could not be had at higher rates now, and grain and flour are at present the chief freight.

Important action was also had concerning the live stock traffic, at a separate meeting, and here an agreement seems to have been reached with less difficulty. The cause or one of the causes of the recent trouble was the demand of the Baltimore & Ohio for a share of the live stock shipped from Chicago to New York. The details of the agreement have not been made public, but we understand that the Baltimore & Ohio gets some share of the traffic, and that the rest is divided as under the old agreement which was executed by the "eveners"—which we understand to have been three-eighths each to the Michigan Central and the Lake Shore and one-fourth to the Pittsburgh, Fort Wayne & Chicago. But the distinguishing feature in this agreement is the method adopted for effecting the division. A joint live-stock agent is to be appointed, through whom all shipments are to be made. You can ship by any route you please at \$90 a car-load, but if you ship as he tells you to, you will be charged \$70 a car-load. That is, the companies have the work done by "eveners" again, but they engage all the stock shippers for the work instead of selecting three out of their number. Virtually, of course, this establishes a 35-cent. rate (\$70 per car-load) on all cattle. This is likely to be much more acceptable to cattle-shippers than the old arrangement, which they charged with tending to give a monopoly of the business to the eveners.

The pooling of Chicago business was considered to be the necessary first step to the maintenance of rates. But it is only the first step. It now remains to make divisions at other Western cities, for which a meeting has been convened to meet in New York on Thursday, just after we go to press. It has not been very difficult heretofore to make these divisions. St. Louis, which has the largest business to divide, has heretofore been able to settle the matter very quickly without arbitration. But it must be remembered that a large part of the work remains to be done, and that there should be no delay in doing it.

The Vanderbilt Army.

The roads which are controlled by the President of the New York Central & Hudson River (he is President of all except three, which have together 640 miles of road) have an aggregate length of 3,620 miles of road and 6,102 miles of track. On these there were employed, as shown by recent pay-rolls, 27,706 men, who receive, in round numbers, \$1,178,000 per month, or more than \$14,000,000 per year. There is probably but one other case in the world where so many men are under the orders of a single man not an army officer or government official. The number is somewhat greater than that of the United States army as it now stands.

The roads on which this force is employed, the mileage of road and of track, etc., are as follows:

	Mile of—		No. of men—		Monthly pay-roll.
	Road.	Track.	Total.	Per mile track.	
New York Central & Hudson River.....	866	2,277	10,728	4.71	\$465,000
New York & Harlem.....	134	195	870	4.46	37,000
Lake Shore & Michigan Southern.....	1,176	1,874	8,952	4.78	398,000
Canada Southern.....	443	460	1,961	3.54	65,000
Michigan Central.....	804	1,068	4,850	4.54	188,000
Dunkirk, Allegheny Valley & Pitts.....	90	101	380	3.76	14,000
Rochester & State Line.....	107	118	265	2.25	11,000
Total.....	3,620	6,102	27,706	4.54	\$1,178,000

The aggregate amount of the capital stock of these corporations is \$186,116,504, and its average value at the present market price is but little below par, the premiums on the large amount of New York Central and Harlem stocks nearly balancing the discounts on the other stocks.

Record of New Railroad Construction

This number of the *Railroad Gazette* contains information of the laying of track on new railroads as follows:

St. Joseph & Des Moines.—Extended from Union Star, Mo., northeast to King City, 9 miles. It is of 3 ft. gauge.

Springfield, Jackson & Pomeroy.—The *Horse Creek Branch* is completed from Jackson, Jackson County, O., to Eureka, 2 miles. It is of 3 ft. gauge.

Profile & Franconia Notch.—Completed from Bethlehem, N. H., to the Profile House, in the White Mountains, 9½ miles. It is of 3 ft. gauge.

Prospect Park & Coney Island.—This company has completed a branch from West Brighton Beach, Coney Island, N. Y., westward to Coney Island Point, 1½ miles.

Port Huron & Northwestern.—Extended from Davisville, Mich., north by west to Crosswell, 4 miles. It is of 3 ft. gauge.

Ft. Madison & Northwestern.—The first track is laid from Ft. Madison, Ia., westward to Pitman Creek, 10 miles. It is of 3 ft. gauge.

Spartanburg & Asheville.—Extended from Flat Rock, N. C., northward to Hendersonville, 6 miles. It is of 5 ft. gauge.

This is a total of 42 miles of new railroad, making 661 miles completed thus far this year, against 413 miles reported for the same period in 1878, 570 miles in 1877, 628 in 1876, 296 in 1875, 537 in 1874, and 1,181 in 1873.

LAKE AND CANAL RATES were lower last week, but recovered a little Monday, when the new rail rates went into force. Last week, after Wednesday, lake rates from Chicago to Buffalo were 1½ cents a bushel for corn and 2 for wheat, and canal rates were 3½ cents for corn and 4 for wheat. These lake rates are ½ cent higher, but the canal rates are ½ cent lower than the lowest rates last year or any other year. The Vessel Owners' Association was not

able to maintain the rates it prescribed, but after they had been broken by many vessels, it prevented any further violation by announcing 1½ cents for wheat and 1 cent for corn as minimum rates from Chicago to Buffalo, which it was certain that no one would cut, not being enough to pay sailors' wages. Quotations last Wednesday were 1½ to 2 cents for corn and 2 and 2½ for wheat from Chicago to Buffalo and 3½ for corn and 4½ for wheat from Buffalo to New York. With the Buffalo elevator charge this makes a through Chicago-New York rate of 6 to 6½ cents per bushel for corn and 6½ to 7 for wheat; while the new all-rail rate amounts to 8.4 cents for corn and 9 for wheat. With these differences the railroads are likely to lose grain, but between carrying at 10 to 12½ cents a hundred and not carrying at all the choice should be easy.

WHISTLING AT CROSSINGS seemed to be a good thing to the last Legislature of Indiana, so it passed a law requiring locomotive whistles to be blown at every highway crossing under a severe penalty. To a legislator who lives near a railroad with half-a-dozen trains a day, and whose house is half a mile or so from the road, this may seem all right; but now from Indianapolis, La Fayette, Ft. Wayne and other towns where trains are numerous and there are many streets to cross, there comes up a wall of horror and despair. The railroad men are obeying the law strictly and the towns and cities are deafened by the constant whistling; sleep is impossible while freight trains go howling by all night; babies cannot be put to sleep, and sick and nervous people are being driven wild. What to do about it nobody seems to know. The Governor has no power to suspend the execution of the law, the railroad men will not subject themselves to its penalties, and there is no chance for appeal to the courts. General opinion is that it is a capital law to repeal, and it is safe to say that no member from a railroad town who voted for it can hope for a reelection.

Master Car-Builders' Convention.

[BY TELEGRAPH TO THE RAILROAD GAZETTE.]

The meeting was called to order Tuesday, June 10, by President Garvey. The members were welcomed to Chicago by an address from Mayor Carter H. Harrison. About fifty members were present. The President addressed the Association and announced the death of four members during the past year. The report on train brakes was read and discussed. The committee on that subject was continued, and was authorized to confer with the Western Railroad Association in relation to making experiments on brakes. Mr. Raymond, the Secretary of that Association, addressed the meeting and stated that it was desirable to secure cooperation between the Car Builders' and that Association. The subject of broken wheels was discussed during the rest of session, and in the afternoon members took a short excursion on the Pittsburgh, Fort Wayne & Chicago Railway to see a train of new Pullman cars. The attendance at Chicago promises to be larger than for several years past.

Niagara Falls Meeting for Dividing Chicago Business.

The following is the official report of the meeting of the Trunk Line Executive Committee and the representatives of the roads from Chicago eastward for the purpose of making a division of east-bound freight from Chicago, held at the Cataract House, Niagara Falls, N. Y., June 5, 1879. Pursuant to the call of the Chairman of the Joint Executive Committee, the representatives of the trunk lines and of the Chicago roads and their eastern connections assembled at 4 p. m.

Present:
John King, Jr., representing Baltimore & Ohio.
J. N. McCullough, Wm. Stewart, representing Pennsylvania Company.
John Newell, C. M. Gray, representing Lake Shore & Michigan Southern.
H. B. Ledyard, representing Michigan Central.
G. R. Blanchard, R. C. Vilas, E. R. Wadsworth, S. Little, representing New York, Lake Erie & Western.
J. H. Rutter, J. B. Dutcher, W. H. Cumming, representing New York Central & Hudson River.
A. J. Cassatt, D. S. Gray, representing Pennsylvania Railroad.
L. J. Seargeant, J. A. Moore, representing Grand Trunk.
L. Millis, representing Central Vermont.
Wm. Bliss, H. J. Hayden, representing Boston & Albany.
W. H. Perry, representing Canada Southern.
H. R. Duval, T. A. Lewis, H. C. Vilas, representing Great Western Dispatch.
E. S. Washburn, C. L. Hartwell, representing Fitchburg Railroad.
H. W. Hubbard, representing Vandallia Line.
L. Hills, representing Cleveland, Columbus, Chicago & Indianapolis.
S. D. Caldwell, representing Red Line.
George Darling, representing White Line.
Albert Fink, Chairman.
Isaac Markens, Acting Secretary.

The Chairman stated that this meeting was called for the purpose of making a division of the east-bound traffic from Chicago.

Mr. Rutter addressed the meeting at some length, giving his views in regard to the method of pooling the traffic, and suggesting, as his preference, the division of all traffic from the western terminal points between the trunk lines themselves, as the first step to be taken, and to then subdivide the traffic between the western roads. This suggestion was approved by Messrs. Blanchard, King and Cassatt.

After a general discussion of this proposition and interchange of views as to the period of time which should form the basis of such division, it was finally

Resolved, That the Commissioner procure uniform statements from all the trunk lines for the year 1878, of all shipments (except live stock and oil) made from Toronto and the western termini of the other trunk lines to all points east of these termini, including local stations, and that the Commissioner call a meeting of the trunk line representatives as soon as this information is procured for the purpose of agreeing upon a division of traffic.

The Chairman stated that it would require some time to perfect the agreement for pooling the east-bound business between the trunk lines from their western termini, and that it was important that this meeting should agree immediately upon a division from Chicago, without which no pools from other western points could be made, and rates could not be restored or maintained.

Mr. Seargeant suggested that a temporary pool from

Chicago should be made, until the final agreement could be reached.

Several propositions were then made as to the period of time the business during which should form the basis of a Chicago pool, none of which were agreed to.

Mr. McCullough then offered the following resolution, which was unanimously adopted:

Resolved, That the question of percentages of the Chicago east-bound traffic, except on live stock, from June 9 until August 1, be determined by Mr. Bliss.

After a short recess, Mr. Bliss having meanwhile examined the necessary data, reported the following percentages:

To the Michigan Central.....	31 per cent.
" Lake Shore.....	26 "
" Pennsylvania.....	34 "
" Baltimore & Ohio.....	9 "

which division was accepted by all parties.

Mr. Ledyard moved that after Monday, the 9th inst., the rate on grain be made 15 cents, and on fourth class 20 cents, which was unanimously adopted.

Mr. Ledyard moved that the rate on live hogs be made 30 cents, instead of 20, as made this morning. (see agreement in regard to live-stock traffic), to take effect from Monday, 9th inst., which was unanimously adopted.

The following resolutions were then adopted:

Resolved, That hereafter notice shall be given of an increase in rates ten days in advance, and that no contracts or arrangements shall be made as to duration or quantities of shipments that will prevent the increased rates being put into effect at the specified time, by all roads.

Resolved, That the general freight agents of the Chicago roads put into effect the agreed Chicago division, commencing Monday, June 9, and that they shall balance the tonnage at the end of each week, and adopt such means as may be necessary to bring about that result.

It was resolved, that the following notice be sent to the parties interested:

"At a meeting held here this day, a pool has been agreed upon upon eastward through freight and live stock from Chicago, including local and through traffic of all the trunk lines to all seaboard cities, taking effect on Monday, 9th inst., and, in pursuance thereof, the rates have been advanced by the Chicago roads present to 15 cents on grain, 20 cents on fourth class, and 30 cents on live hogs, and 45 cents per 100 pounds on cattle to New York, upon a plan which will be communicated fully by mail. We therefore request that you endeavor at once to arrange like pools from all former and requisite pooling points, and that rates be advanced upon the same day to the basis above mentioned. It has been agreed that ten days' notice shall be given of any advance in rates, but that no other agreement shall be made with any parties as to duration or quantities of shipments conflicting with such notice. In pursuance of these resolutions, we notify you that our respective companies will not participate in any rates on and after that day at less than the above basis, and will set up the rates on any property billed at less, and refund only upon vouchers showing absolutely that former agreements required them, which vouchers we all agree shall pass through the office of the Commissioner, and be approved by him before payment.

"G. R. BLANCHARD,
"J. H. RUTTER,
"A. J. CASSATT,
"JOHN KING, JR."

It was then

Resolved, That the chairman call a meeting of the Joint Executive Committee, and accordingly the following notice was agreed to be sent to all members of the committee, and all other Western roads interested in the subjects to be considered:

"A meeting of the Joint Executive Committee is called at the Chairman's office, New York, at 11 o'clock, a. m., Thursday, June 12, for the purpose of perfecting pools upon freight and live-stock from Western cities, and to endeavor to readjust rates between interior points and seaboard cities, and to take into consideration any other subject relating to the competitive freight and passenger traffic."

The meeting then adjourned.

ALBERT FINK, Chairman.

ISAAC MARKENS, Acting Secretary.

General Railroad News.

MEETINGS AND ANNOUNCEMENTS.

Meetings.

Meetings will be held as follows:

Vermont Valley, annual meeting, at the office in Brattleboro, Vt., June 18, at 1 p. m.

Washington City, Virginia Midland & Great Southern, general meeting of bondholders to consider a plan of settlement, at the National Mechanics' Bank in Baltimore, June 26, at noon.

Railroad Conventions.

The *American Society of Civil Engineers* will hold its eleventh annual convention in Cleveland, O., beginning June 17.

The *Yard-Masters' Mutual Benefit Association* will hold its fifth annual convention at the Gibson House, Cincinnati, June 24.

Dividends.

Dividends have been declared as follows:

Morris & Essex (leased to Delaware, Lackawanna & Western), 3½ per cent., semi-annual, payable July 1. Transfer books closed June 10.

New York & Harlem (leased to New York Central & Hudson River), 4 per cent., semi-annual, payable July 1. Transfer books close June 14.

New York Central & Hudson River, 2 per cent., quarterly, payable July 15. Transfer books close June 14.

Lehigh Valley, 1 per cent., quarterly, payable July 15.

Western Union Telegraph, 1½ per cent., quarterly, payable July 15. Also a stock dividend of 17 per cent., payable at the same time. Transfer books close June 20.

Mail Service Extensions.

Mail service has been ordered over railroad lines as follows:

Pratt Coal & Coke Co., service ordered from Birmingham, Ala., to Pratt mines, 5.97 miles.

Chicago & Alton, service ordered over the new *Kansas City Extension*, from Mexico, Mo., to Kansas City, 164.69 miles.

North Wisconsin, service extended from Clayton, Wis., to Cumberland, 15.70 miles.

Port Huron & Northwestern, service ordered from Port Huron, Mich., to Crowsell, 28.25 miles.

Chicago, Milwaukee & St. Paul, service ordered over *Viroqua Branch* from Sparta, Wis., to Melina, 13.19 miles.

Foreclosures Sales.

The *St. Paul & Pacific, First Division*, was sold in St. Paul, Minn., June 2, under decrees of foreclosure and bought for \$1,350,000 for account of the St. Paul, Minneapolis and

Manitoba Company. The First Division extends from St. Anthony, Minn., to Breckenridge, 207 miles, and had upon it four mortgages. The sale was made under the \$1,500,000 mortgage covering 150 miles from St. Anthony west and under the \$6,000,000 mortgage, the total amount of bonds and overdue interest, under which was \$6,945,385. The first general, or \$3,000,000 mortgage remains, the sale being made subject to its lien.

The *St. Paul & Pacific, Main Line*, was sold in St. Paul, Minn., June 5, under foreclosure of mortgage and bought for \$250,000 for account of the St. Paul, Minneapolis & Manitoba Company. This division is 150 miles long, from St. Paul to Morris, and was sold under a mortgage for \$3,000,000. The St. Vincent Extension is still to be sold to complete the transfer to the new company.

The *International & Great Northern* road is to be sold in Austin, Tex., July 31, under decrees of foreclosure granted by the United States Circuit Court. It will be sold in two lots, under the two separate first mortgages, one consisting of the 253 miles of the former Houston & Great Northern road, the other of the 266 miles of the former International road. The terms for each division are the same: Minimum price \$500,000, and the buyers must pay \$25,000 at time of sale, with such further sum in cash as may be needed to pay Receivers' debts, costs of sale and other charges. For the rest the bonds and over-due coupons will be received at their *pro rata* value. The road runs from Longview, Tex., to Austin, 232 miles, with a branch from Palestine to Houston, 181 miles, and 102 miles in shorter branches. The bondholders have agreed upon a plan of reconstruction.

The *Reading & Lehigh* road, formerly the Berks County road, is to be sold in Philadelphia, Sept. 23, under a mortgage for \$1,500,000. The road was sold once before at sheriff's sale and bought by the creditors, who organized the present company and leased to the Philadelphia & Reading Company. The road is 45 miles long, from Reading, Pa., to Slatington.

Yard-Masters' Mutual Benefit Association.

The fifth annual convention was held in Cincinnati, June 4, with a large attendance, representing roads in all parts of the United States. The reports of the officers showed the Association to be in a prosperous condition, with a small balance in the treasury. It was resolved to change the time of the annual meeting from the first to the second Wednesday in June, and Boston was chosen as the place for the next annual meeting.

Railroad Commissioners' Convention.

The convention of Railroad Commissioners met pursuant to call at the Clarendon Hotel, Saratoga, N. Y., June 10. There were present the following gentlemen:

New Hampshire, Granville P. Conn, Wm. A. Pierce, David E. Willard, Commissioners.
Massachusetts, Charles Francis Adams, Jr., A. D. Briggs, E. W. Kinsley, Commissioners; J. H. Goodspeed, Accountant.

Connecticut, George M. Woodruff, John W. Bacon, Commissioners; George T. Utley, Clerk.
Virginia, Thomas H. Carter, Commissioner.

South Carolina, Milton L. Bonham.
Michigan, W. B. Williams, Commissioner; S. F. Cook, Deputy Commissioner.

Illinois, George M. Bogue, J. H. Oberly, Commissioners.
Wisconsin, A. J. Turner, Commissioner.

C. P. Leland, Auditor Lake Shore & Michigan Southern Railway; George E. Towne, late Auditor Boston, Clinton, Fitchburg & New Bedford Railroad.

Commissioner Williams was chosen Chairman, and Messrs. Goodspeed and Utley, Clerks.

The telegraphic report of the second day's proceedings says: "The Railroad Commissioners, at their morning session, discussed the report of the Committee on a Uniform System of Accounts, which makes a printed pamphlet of 16 pages. For the expense account they recommend substantially the form used by the Lake Shore & Michigan Southern road. They recommend that the legislatures of the different states prescribe these forms, and have all roads report on June 30 in each state to the Commissioners or authorized officers. The Committee on a Basis of Taxation reported that it had received reports from every state in the Union and from every country in Europe except France, and that there is no uniform basis upon which to arrange statistics. They recommend a plan based on the gross earnings, with extra for real estate owned in addition to the road-bed. They will formulate a plan on this basis to be reported in November. The commissioners closed their session this afternoon without receiving a report on the position of railroads to the body politic, which Gen. Marmaduke, of Missouri, had prepared, and which was expected to treat of the questions which have arisen since the Granger laws were passed in Western states. The report will now be sent to the Executive Committee."

Railroad Employees' Mutual Benefit Association.

The ninth annual meeting of this Association was held at the St. James Hotel, New York, June 11, the President, Mr. John E. Simpson, of the Terre Haute & Indianapolis Railroad, in the chair, and Mr. Henry B. Maxwell, of Chicago, acting as Secretary. This Association numbers 1,000 of the employees of all the railroads in the United States, and the representation was about forty delegates. During the past nine years the Association paid out to the assignees of deceased members \$286,000. The treasury never contains more money at any time than is sufficient for current expenses, the method of assistance being the imposition of a one-dollar tax on each member whenever a death occurs in the Society. Only the usual routine business was transacted. The salary of the Secretary (who takes charge of the business of the Association during the year) was fixed at \$1,000. There was considerable discussion among the delegates as to what method was best to increase the membership of the Society, and it was finally determined that no formal plan should be attempted, but that each member should do the best he could. The meeting adjourned till the second Wednesday of June, 1880, at Cincinnati.

ELECTIONS AND APPOINTMENTS.

Boston & Maine.—Mr. Wm. Smith has been appointed Master Mechanic, in place of F. A. Wait, resigned. Mr. Smith will have charge of all men connected with the Motive Power Department, the office of Engine Dispatcher being abolished.

Brooklyn & Coney Island Central.—The officers of this company are: President, Alfred Ely; Directors, George R. Carrington, Wm. Ely, A. F. Johnson, H. Smith, John S. Thornton; Secretary and Treasurer, F. B. Johnson.

Cairo & Vincennes.—Car tracers should be addressed to T. E. Clarke, Master of Transportation, Cairo, Ill.

Canada Southern.—The annual meetings of this company's leased and controlled lines were held at Grosse Ile, Mich., March 5, and the following directors were elected: *Toledo, Canada Southern & Detroit*—C. Vanderbilt, J. Tillinghast, S. F. Barger, Aug. Schell, E. D. Worcester,

E. A. Wickes, W. L. Scott, Jos. Harker, Geo. W. Davis. *Chicago & Canada Southern*.—W. H. Vanderbilt, C. Vanderbilt, Sidney Dillon, Aug. Schell, E. D. Worcester, Samuel F. Barger, W. L. Scott, John Newell, E. A. Wickes. *Canada Southern Bridge*.—W. K. Vanderbilt, J. Tillinghast, S. F. Barger, Aug. Schell, E. D. Worcester, E. A. Wickes, W. L. Scott, Sidney Dillon, J. W. Converse.

Chicago, Milwaukee & St. Paul.—At the annual meeting in Milwaukee, June 7, the following directors were chosen: Alexander Mitchell, S. S. Merrill, John Plankinton, Milwaukee, Wis.; Jason C. Easton, Chatfield, Minn.; Selah Chamberlain, Cleveland, O.; John M. Burke, Hugh T. Dickey, David Dows, Peter Geddes, Jerome Millbank, James Stillman, Abraham Van Nest, Julius Wadsworth, New York. The new directors are Messrs. Easton, Dickey and Stillman, who succeed J. J. Bowman, Walter S. Gurnee and George W. Weld. The board re-elected Alexander Mitchell, President; Julius Wadsworth, Vice-President.

Chicago & Northwestern.—At the annual meeting in Chicago, June 5, the following directors were chosen for three years: A. G. Dulman, Albert Keep, Marvin L. Sykes, Jr., Samuel F. Barger, Chauncey M. Depew, Augustus Schell. The first three are re-elected; the last three, who represent the Vanderbilt interest, succeed W. H. Ferry, R. P. Flower and Perry H. Smith. Mr. R. P. Flower was afterward chosen a director for two years, in place of Mr. J. L. Ten Have, resigned. The board re-elected Albert Keep, President; M. L. Sykes, Vice-President, Secretary and Treasurer; Marvin Hughitt, General Manager.

Cincinnati, Wabash & Michigan.—At the annual meeting in Wabash, Ind., June 5, the following directors were chosen: C. Cowgill, C. E. Cowgill, Wabash, Ind.; C. W. Chapman, Warsaw, Ind.; J. H. Defrees, Goshen, Ind.; Norman Beckley, Elkhart, Ind.; A. C. Baldwin, H. Chisholm, T. H. Clarke, W. S. Jones, J. H. Wade, J. H. Wade, Jr., Cleveland, O. The board elected J. H. Wade President; W. S. Jones, Secretary and Treasurer; Norman Beckley, General Manager.

East River Bridge.—The following trustees have been appointed to represent the city of Brooklyn for the ensuing year: Henry W. Slocom, Wm. Marshall, Wm. C. Kingsley, J. S. T. Stranahan, A. W. Humphrey, A. C. Barnes, Benjamin F. Tracy, Wm. Taylor.

Flint & Pere Marquette.—At the annual meeting in East Saginaw, June 4, the following directors were chosen: H. C. Potter, W. L. Webber, East Saginaw, Mich.; S. P. Burt, Milwaukee, Wis.; John H. Prentiss, Chicago; Philo Remington, Ilion, N. Y.; Henry H. Fish, Utica, N. Y.; Wm. W. Crapo, Alexander H. Seabury, New Bedford, Mass.; Jesse Hoyt, New York. The only new director is Mr. Burt, who is added to the board to fill a vacancy which has existed for some time.

Ft. Dodge & Ft. Ridgeley.—The officers now are: G. W. Bussett, President; L. Blomden, Vice-President; G. T. Peterson, Secretary; G. R. Pearson, Treasurer and Superintendent. Offices at Ft. Dodge, Ia.

Houston, East & West Texas.—Mr. D. R. Murphy has been appointed Master Mechanic, with office in Houston, Tex. He was formerly connected with the National Locomotive Works at Connellsville, Pa.

International & Great Northern.—Mr. W. K. Bixby has been appointed General Baggage Agent, with office in Palestine, Tex. He has been for a number of years baggage agent at Houston.

Iron.—The officers now are: Charles Campbell, President; W. W. Johnson, Treasurer; Samuel Richards, Secretary and General Freight and Ticket Agent. Offices at Ironton, O.

Lake Shore & Michigan Southern.—Mr. Henry A. Phillips has been appointed Road-Master of the Detroit-Toledo Division, in place of W. B. Curtis, resigned.

Lehigh Valley.—At the meeting of the board in Philadelphia, June 10, it was resolved that, out of respect for the memory of the late President, it is inexpedient to elect a President at this time. Vice-President Charles Hartshorne was directed to perform the duties of President until the next annual election.

Manchester & Keene.—B. F. George, Superintendent, having been removed, all communications should be addressed to George M. Osgood, Greenfield, N. H.

Minnesota & Black Hills.—The first board of directors is as follows: E. F. Drake, John S. Prince, R. F. Hersey, J. W. Bishop, H. H. Sibley, T. A. Harrison, H. G. Harrison, J. W. Pence, W. D. Washburn, C. H. Bigelow, R. Blakeley, A. H. Wilder, John L. Merriam, G. A. Hamilton, Horace Thompson. The officers are: H. G. Harrison, President; H. H. Sibley, Vice President; George A. Hamilton, Secretary; Horace Thompson, Treasurer. Office in St. Paul, Minn.

Puduch & Elizabethtown.—Mr. W. G. Sutherland has been appointed Train-Master, in place of P. Stewart, deceased. Office at Elizabethtown, Ky.

Philadelphia, Newtown & New York.—The officers are now as follows: H. G. Sickle, President; L. L. Bush, General Superintendent; George A. Rahm, Secretary; Smith Harper, Treasurer; John H. Kraus, Auditor; S. C. Slaymaker, Chief Engineer. Offices at No. 404 Locust street, Philadelphia, Pa.

Philadelphia & Reading.—Mr. George De B. Keim has been chosen President *pro tem.* during President Gowen's absence in Europe.

Mr. A. H. Fracker has been appointed Superintendent of the North Penn & Bound Brook Division, which includes the lately leased North Pennsylvania and Delaware & Bound Brook roads. Mr. Fracker was Superintendent of the North Pennsylvania, and has been connected with that road for many years.

Railroad Employees' Mutual Benefit Association.—At the annual meeting in New York, June 11, the old officers were re-elected, as follows: President, Major John E. Simpson; Vice-President, E. D. Parker; Secretary, Henry B. Maxwell; Treasurer, Thomas C. Hatch.

Rensselaer & Saratoga.—At the annual meeting in Troy, N. Y., June 2, the following directors were chosen: George H. Cramer, Joseph M. Warren, E. Thompson Gale, William A. Sheppard, Joseph W. Fuller, Isaac V. Baker, Thomas Dickson, William H. Vanderbilt, William Howard Hart, Ira C. Allen, James Forsyth, Thomas White, Henry C. Lockwood. The road is leased to the Delaware & Hudson Canal Company.

St. Louis, Alton & Terre Haute.—At the annual meeting in St. Louis, June 2, the following directors were elected for three years: George W. Parker, W. K. Murphy, St. Louis; George W. Wall, Duquoin, Ill.; A. H. H. Rountree, Hillsboro, Ill. The board re-elected W. Bayard Cutting President; George W. Parker, Vice-President; E. F. Leonard, Secretary; H. A. Crosby, Assistant Secretary.

St. Paul & Chicago.—The officers of this new company

are: Hans B. Warner, President; Selah Strickland, Vice-President; Newell H. Clapp, Secretary and Treasurer. Mr. Clapp's office is in Hudson, Wis.

Saginaw Valley & St. Louis.—Messrs. Charles Merriam and John B. Milliken have been chosen directors to fill vacancies. Both are connected with the Detroit, Lansing & Northern road.

Saratoga & Schenectady.—At the annual meeting in Troy, N. Y., June 2, the following directors were chosen: George H. Cramer, E. Thompson Gale, Joseph M. Warren, LeGrand C. Cramer, Thomas W. Lockwood, Charles N. Lockwood, Charles B. Russell, James M. Marvin, Stephen E. Warren. The road is leased to the Rensselaer & Saratoga, and subleased to the Delaware & Hudson Canal Company.

Vermont & Massachusetts.—At the annual meeting in Boston, June 4, the following directors were chosen: Edward L. Davis, James A. Dupee, George F. Fay, Francis Goodhue, Wm. H. Hill, Daniel S. Richardson, Thornton K. Ware. The board elected Daniel S. Richardson President; B. D. Locke, Clerk; Franklin N. Poor, Treasurer. The road is leased to the Fitchburg Company.

Yard-Masters' Mutual Benefit Association.—At the annual convention in Cincinnati, June 4, the following officers were elected: President, Geo. W. Evans, Dallas, Tex.; First Vice-President, Jas. A. Washburn, Concord, N. H.; Second Vice-President, A. F. Fleming, Chicago; Secretary and Treasurer, Joseph Sanger, Indianapolis.

PERSONAL.

—Mr. Franklin B. Gowen, President of the Philadelphia & Reading Company, sailed from New York for England June 7. It is said that he goes for the purpose of securing the approval of the English holders of securities to the leases of the North Pennsylvania and the Delaware & Bound Brook roads. It is also said that his visit has some reference to the Madeira & Mamore road, for which the Reading Company has furnished rails.

—Mr. F. A. Wait has resigned his position as Master Mechanic of the Boston & Maine Railroad.

—Mr. Wm. B. Brownhill has resigned his position as Master Mechanic of the Kansas Central Railroad, and has taken an engine on the Southwestern Division of the Rock Island road.

—Mr. James K. Cullen, late Foreman of the Round House at Cincinnati of the Indianapolis, Cincinnati & La Fayette Railroad, was presented on Saturday, June 7, by his fellow employees in the locomotive department, with an elegant cluster diamond pin. He thanked them in a very affecting manner for the token of the esteem in which they held him. He resigned that position to assume the superintendency of the Niles Tool Works, Hamilton, O., and leaves numerous friends behind who congratulate him upon his new appointment, and wish him success in his new position. He is a son of the former Master Mechanic of the Cincinnati, Hamilton & Dayton, well known as a citizen of Cincinnati and in railroad circles.

—A Missouri correspondent of the New York Sun writes a long letter to nominate Mr. Thomas Allen, President of the St. Louis, Iron Mountain & Southern Company, as Democratic candidate for President next year. Mr. Allen has been a member of Congress and was a candidate for United States Senator from Missouri last winter.

—Mr. John N. A. Griswold, long a director of the Chicago, Burlington & Quincy, and a large holder of the securities of that and other companies, has required a Supreme Court decision to determine where he lived. He is the fortunate owner of three residences, at Newport, R. I., at Portsmouth, N. H., and in Bo ton. Paying taxes on his real estate in each place, he chose Portsmouth as his legal residence and there paid tax on his personal property. Newport, however, assessed taxes on his personal estate, but he resisted payment and the case was finally carried up to the Rhode Island Supreme Court, which has just decided that he had a right to elect which of his three dwelling-places is his legal residence, and that Portsmouth is accordingly entitled to his citizenship and his personal tax. But Mr. Griswold must go to New Hampshire election-day, hereafter, if he wants to vote.

TRAFFIC AND EARNINGS.

Grain Movement.

Receipts and shipments of grain of all kinds at the eight reporting Northwestern markets, and receipts at the seven Atlantic ports for the week ending May 31 have been, in bushels, for the past six years:

	Northwestern			Atlantic
	Receipts.	Shipments.	By rail—	
	Total.	Bushels.	P. c.	receipts.
1874..	5,324,037	5,005,175	1,286,734	20.0
1875..	2,641,987	2,769,901	1,080,895	39.0
1876..	4,930,853	4,310,064	1,797,922	42.7
1877..	2,835,639	2,114,639	824,992	39.0
1878..	6,556,985	5,045,382	2,004,090	39.7
1879..	6,168,629	5,087,244	2,832,238	55.7

Though the receipts at Northwestern markets are considerably smaller than for the corresponding week last year, they are enormously greater than in any previous week this. The largest receipts reported this year before were 4,297,006 bushels, for the week ending May 3. Since March there has been no week this year in which the Northwestern receipts have equaled those of last year, and their aggregate receipts in April and May have been about 24 per cent. less (32,498,857 bushels against 42,125,699 bushels). The earlier spring rains gave the farmers more time to market their grain than they have had this year. Of the receipts of the week this year, 57 per cent. were at Chicago, 11.1 at Milwaukee, 10 at St. Louis, 10.6 at Peoria, 5.5 at Toledo, 4 at Detroit, and 0.8 per cent. at Cleveland. The receipts at Chicago are about as large as those of all the places have been in previous week.

The shipments of these markets are larger for the week this year than for any previous corresponding week, but have been largely exceeded this year once. For the two months since March, the aggregate shipments have been 37,093,634 bushels against 37,113,792 last year—almost the same; but last year 23,240,013 bushels, or 62.6 per cent. of the whole, were shipped by lake; this year only 12,938,941 bushels, or 35 per cent. of the whole. It should be remembered, however, that the lakes were open 61 days last year and only 35 this, so that the average daily shipments by lake were not very different in the two years—380,984 in 1878 and 370,541 in 1879. But the proportion carried by rail in May, when navigation was open both years, has been much larger this year, as shown below:

	1879.	P. c.	1878.	P. c.
Shipped by lake.....	11,880,814	47.8	8,785,340	37.4
Shipped by rail.....	12,938,941	32.2	14,000,579	62.6
Total.....	24,819,755	100.0	23,481,925	100.0

The railroads never before carried so large an amount of grain from the lake ports in the month of May; but they carried a larger proportion in 1876, when they first com-

peted with the water route for the export of grain throughout the season. In May of that year they carried from the Northwestern markets 10,330,446 bushels out of a total of 19,975,712, or 51.3 per cent. of the whole. It is notable that a 12½-cent rate this year has not been able to divert so large a proportion of the grain as a 20-cent rate in 1876.

The receipts at Atlantic ports for the week this year are a trifle less than for the previous week, but larger than in any week before this year, though much smaller than for the corresponding week last year. Last year May receipts were much larger but April receipts much smaller than this year. The canal delivered throughout May last year, but only about a week or ten days of the month this year. The aggregate for the two months has been nearly the same both years—44,064,128 bushels last year against 43,412,251 this. The largest receipts in any previous May were 21,841,990 bushels in 1876. In 1878 the May receipts were 20,018,667 bushels; this year they were 24,943,358. Taking April and May together, receipts are larger this year than ever before.

Of the receipts at Atlantic ports for the week ending May 31, 49.9 per cent. were at New York, 18.4 at Philadelphia, 15.9 at Baltimore, 7.6 at Montreal, 6.2 at Boston, 1.9 at New Orleans, and 0.1 at Portland. The New York receipts are a larger quantity and a larger proportion of the whole than in any previous week this year.

During the week ending June 10 (Tuesday), receipts and shipments at Chicago and Milwaukee were:

	Receipts.	Shipments.
Chicago.....	3,744,388	4,554,173
Milwaukee.....	669,700	854,000

Receipts are a little less than for the previous week, but Chicago shipments are 59 per cent. greater, and among the largest ever known—probably stimulated by the announcement of the advance in rail rates.

For the same week receipts and shipments at Buffalo were:

	Receipts.	Shipments.
By rail.....	1,176,600	1,336,680
By water.....	1,198,967	1,300,852
Total.....	2,375,567	2,637,532

Compared with the corresponding week last year (when also rail rates were extremely low and irregular), lake receipts are 37½ per cent. less and rail receipts 75 per cent. greater; canal shipments are 18 per cent. less and rail shipments 35 per cent. greater. The diversion from the rail to the water routes is marked.

For the same week receipts at the four leading Atlantic ports were:

	June 10, '79.	June 3, '79.	June 9, '78.
New York.....	3,192,242	3,223,399	3,052,434
Philadelphia.....	1,111,300	1,583,400	1,085,600
Baltimore.....	943,079	850,367	576,960
Boston.....	442,215	392,700	431,570
Total.....	5,748,836	6,049,866	5,146,510

New York received 55½ per cent. of the whole last week this year, against 53½ per cent. the previous week, and 59½ the corresponding week last year. Compared with the previous week Philadelphia shows a large loss and Baltimore a small gain.

San Francisco wheat exports for May and the eleven months of the California crop year, from July 1 to May 31, were as follows, in bushels:

	1878-79.	1877-78.	Increase.	P. c.
May.....	861,882	342,307	519,575	151.9
Crop year.....	10,119,497	6,032,162	4,087,335	168.3

Of the 14 cargoes included in the May exports one went to Callao, one to Cape Town, one to Antwerp, one to Dunkirk, France, and the remaining 10 to Great Britain.

San Francisco receipts for the week ending May 31 were 2,836 barrels flour, 302,853 bushels wheat, 32,973 bushels barley and 21,774 bushels other grain; total, reducing flour to wheat, 271,780 bushels.

Coal Movement.

Tonnages reported for the five months ending May 31 are as follows, the tonnage in each case being only that originating on the line to which it is credited:

	1879.	1878.	Inc. or Dec.	P. c.
Anthracite:				
Philadelphia & Reading.....	2,754,937	1,372,596	1,382,401	107.2
No. Central, Shamokin Div., and Summit Branch R. R.....	309,841	225,658	84,183	37.3
Sunbury, Hazleton & Wilkesbarre.....	9,715	8,615	1,100	12.8
Pennsylvania Canal.....	87,679	64,120	23,559	36.8
Central of N. J., Lehigh Div.....	1,530,003	760,080	769,923	101.3
Lehigh Valley.....	1,531,541	1,111,259	420,282	37.8
Penn. & New York.....	9,344	9,593	249	2.6
Del., Lackawanna & Western.....	1,345,984	707,739	638,245	90.2
Del. & Hudson Canal Co.....	1,173,840	789,657	384,183	48.6
Pennsylvania Coal Co. State Line & Sullivan.....	525,500	263,659	261,841	99.3
	21,466	12,795	8,671	67.8
Total anthracite.....	9,290,850	5,325,681	3,965,169	74.6

	1879.	1878.	Inc. or Dec.	P. c.
Semi-bituminous:				
Cumberland, Balt. & Ohio R. R.....	351,092	338,810	12,282	3.9
Cumberland, Ches. & Ohio Canal.....	140,473	126,587	13,885	11.0
Cumberland, Bedford Div., P. R. R.....	65,949	34,042	31,907	93.8
Huntingdon & Broad Top.....	58,064	57,174	890	2.6
East Broad Top.....	28,001	27,088	913	3.4
Tyrone & Clearfield.....	583,429	493,032	90,397	18.3
Bellefonte & Snow Shoe.....	16,390	11,812	4,578	38.8
Total semi-bituminous.....	1,944,897	1,088,545	856,352	14.4

	1879.	1878.	Inc. or Dec.	P. c.
Bituminous:				
Allegheny Region, Pa. R. R.....	145,001	124,433	20,568	17.3
Penn. and Westmoreland.....	73,295	70,290	3,005	7.0
West Penna. R. R.....	323,680	293,206	30,474	11.4
West Penna. R. R. Southwest Penn. R. R. Allegheny Region, Pa. R. R.....	81,492	84,364	2,872	3.4
	177,510	166,735	10,775	6.5
Total bituminous.....	820,955	759,597	61,358	8.1

	1879.	1878.	Inc. or Dec.	P. c.
Coke:				
Allegheny Region, Pa. R. R.....	21,732	.....	21,732	.....
Penn. and Westmoreland.....	36,021	20,179	15,842	37.0
West Penna. R. R.....	39,610	32,127	7,483	23.3
Southwest Penn. R. R. Pittsburgh Region, Pa. R. R.....	338,077	314,614	23,463	7.5
	63,953	36,878	27,075	73.4
Total coke.....	499,393	409,798	89,595	21.9

All branches of the trade show a considerable increase over last year. These figures include nearly all the coal trade east of the western boundary of Pennsylvania, except the

Tioga Region in that state, which does a business of about 650,000 tons a year, and the river trade of Pittsburgh, all of which goes westward.

Anthracite trade continues active in spite of the slight increase in prices made by the companies. Prices are still very low, and most of the shipments now reported are to fill past contracts at May rates. In view of the increase of prices, most of the carrying companies have raised tolls to tide-water 10 cents per ton.

A feature in the Western bituminous trade has been the recent shipment of some 32,000 tons out of the Kanawha River, West Virginia, to Louisville and Cincinnati, to meet an anticipated demand there, caused by the absence of a "coal-boat rise" in the Ohio to carry down the boats now tied up at Pittsburgh.

Actual tonnage passing over the Huntingdon & Broad Top road for the five months was:

	1879.	1878.	Increase.	P. c.
Broad Top coal.....	58,064	57,174	890	2.6
Cumberland coal.....	73,321	36,029	36,692	100.2
Total.....	131,985	93,803	38,182	40.7

The increase in Cumberland this year is very large, and will probably continue.

The coal tonnage of the Pennsylvania Railroad for the five months ending May 31 was as follows:

	1879.	1878.	Increase.	P. c.
Anthracite.....	374,972	239,438	135,534	56.6
Semi-bituminous.....	722,938	586,392	136,546	23.1
Bituminous.....	689,693	647,860	41,833	6.5
Coke.....	517,481	419,990	97,491	23.2
Total.....	2,305,054	1,893,660	411,394	21.7

Actual tonnage of anthracite passing over the Pennsylvania & New York road for the six months of its fiscal year, from Dec. 1 to May 31 was: 1879, 409,332; 1878, 282,572; increase, 126,760 tons, or 44.8 per cent.

Railroad Earnings.

Earnings for various periods have been reported as follows:

Year ending Dec. 31:	1878.	1877.	Inc. or Dec.	P. c.
Frankfort & Kokomo.....	\$38,397	.....	.....	.....
Net earnings.....	19,201	.....	.....	.....
Five months ending May 31:	1879.	1878.		

	1879.	1878.	Inc. or Dec.	P. c.
Atchison, Topeka & Santa Fe.....	\$2,372,974	\$1,250,096	\$1,122,878	89.5
Bur., Cedar Rapids & No.....	543,645	692,516	D. 148,871	21.5
Central Pacific.....	6,404,129	6,440,253	D. 36,124	0.6
Chicago & Alton.....	1,732,972	1,614,430	I. 85,533	5.4
Chicago, Mil. & St. Paul.....	3,236,000	3,619,527	D. 383,527	10.3
Chicago & North-western.....	5,568,840	5,986,064	D. 417,224	7.0
Chicago, St. Paul & Minneapolis.....	414,851	361,987	I. 52,864	14.6
Galveston, Houston & Henderson.....	189,235	147,914	I. 41,321	27.9
Grand Trunk.....	3,574,083	3,735,491	D. 161,408	4.3
Great Western.....	1,746,440	1,046,081	I. 199,641	10.3
Hannibal & St. Joe.....	750,580	604,024	I. 55,956	8.1
Illinois Central, Illinois lines.....	2,070,236	2,142,717	D. 72,491	3.4
Illinois Central, Iowa lines.....	559,940	672,103	D. 112,163	16.7
Kansas Pacific.....	1,200,112	1,504,795	D. 304,683	30.4
Mo., Kansas & Texas.....	1,020,325	1,048,243	D. 27,918	2.6
Mobile & Ohio.....	754,991	845,595	D. 90,602	10.7
St. Louis, Iron Mt. & Southern.....	1,647,761	1,614,468	I. 33,293	2.1
St. Louis, Kan. City & No.....	1,328,511	1,304,442	I. 24,069	1.8
Toledo, Peoria & Warsaw.....	485,048	536,155	D. 51,107	9.5
Wabash.....	1,880,818	1,880,818	D. 237,900	12.1

	1879.	1878.	Inc. or Dec.	P. c.
Four months ending April 30:				
Dakota Southern.....	\$71,742	\$68,682	I. \$3,060	4.5
Frankfort & Kokomo.....	12,428	11,224	I. 1,204	10.7
Net earnings.....	6,032	4,496	I. 2,136	47.5

	1879.	1878.	Inc. or Dec.	P. c.
St. Paul & Sioux City.....	192,167	180,248	I. 11,919	6.6
Sioux City & St. Paul.....	100,979	116,544	D. 15,565	13.4

	1879.	1878.	Inc. or Dec.	P. c.
Three months ending March 31:				
N. Y., Lake Erie & Western.....	\$3,711,344	\$3,572,638	I. \$138,706	3.9
Net earnings.....	870,231	962,628	D. 112,397	11.4

	1879.	1878.	Inc. or Dec.	P. c.
Month of March:				
Baltimore & Ohio.....	\$1,078,971	\$1,137,414	D. \$58,443	5.3
Net earnings.....	459,820	459,905	D. 85	4.4

	1879.	1878.	Inc. or Dec.	P. c.
N. Y., Lake Erie & Western.....	1,356,780	1,147,208	I. 209,572	18.3
Net earnings.....	411,774	321,836	I. 89,938	27.9

	1879.	1878.	Inc. or Dec.	P. c.
Month of April:				
Dakota Southern.....	\$17,164	\$19,777	D. \$2,613	13.2
St. Paul & Sioux City.....	53,383	49,579	I. 3,804	7.7
Sioux City & St. Paul.....	28,146	28,974	D. 828	2.9

Paul.....	28,146	28,974	D.	828	2.9
<i>Month of May:</i>					
Atchison, Topeka & Santa Fe.....	600,000	304,636	L.	295,364	97.0

Chicago Lumber Traffic.

For the five months from Jan. 1 to June 3, receipts and shipments of lumber and shingles at Chicago, in thousands of feet of lumber and thousands of shingles, have been:

	1879.	1878.	Inc. or Dec.	P. c.
Lumber:				
Receipts.....	307,722	235,125	I. 72,597	30.8
Shipments.....	240,960	215,022	I. 25,938	12.1
Shingles:				
Receipts.....	175,385	163,220	I. 12,165	5.5
Shipments.....	23,209	45,985	D. 22,776	5.0

This is a very important traffic, and gives a clew to immigration and the prosperity of the farmers—better than almost any other. The nearness of the roads to Missouri River points specially favors this traffic. While the shipments this year have been 31 per cent. larger than in 1878, they have been 48 per cent. greater than in 1877 and 51½ more than in 1876 up to the same date.

Mobile Vegetable Traffic.

The Mobile (Ala.) Register notes that the raising and shipment of early vegetables is coming to be an important business in the neighborhood of that city. For the five months ending June 3 shipments by the Mobile & Ohio and the Mobile & Montgomery roads amounted to 35,091 packages, valued at \$81,354. This does not include considerable shipments made from stations outside the city. Most of the shipments were to St. Louis and other Western cities, and furnished a considerable revenue to the roads.

Hog Products.

The exports of pork, bacon and lard from the United States during the seven months from Nov. 1 to March 31 have been:

	1878-79.	1877-78.	Increase.	P. c.
Tons.....	392,904	345,179	47,725	13.9

Shipments from Chicago for the same period have been:

	1878-79.	1877-78.	Increase.	P. c.
Tons.....	363,515	325,086	38,429	11.8

The Chicago shipments alone thus appear to have been nearly equal to the total exports.

The summer hog packing for the three months from March 1 to May 28 is reported as follows, in numbers slaughtered:

	1879.	1878.	Increase.	P. c.
No. hogs packed.....	1,168,534	1,007,946	160,588	6.4

The summer packing in 1878 was very much larger than ever before.

Of the whole number, 56 per cent. was packed at Chicago this year and 61 per cent. last year. The greatest gains in summer packing are at St. Louis, Cleveland and Atchison (which has just begun the business). Indianapolis and Kansas City lose largely.

RAILROAD LAW.**Loss by Fire—Negligence.**

In *Slosson* against the Burlington, Cedar Rapids & Northern Company, plaintiff brought suit to recover damages for 16 stacks of grain set on fire by sparks from a locomotive. Defendant set up negligence of plaintiff in not surrounding the stacks by ditches; also that the burning was accidental. Plaintiff demurred to answer and set up contributory negligence of defendant. The Court below sustained the demurrer and judgment was given for plaintiff. The Iowa Supreme Court, on appeal, held that the company had a right to show accident, and that there was no negligence on its part, and the demurrer should have been overruled. Judgment reversed.

Common Carriers' Liability—Strikes.

The Indiana Supreme Court has just decided the case of *Hollowell* against the Pittsburgh, Cincinnati & St. Louis Co., the summary of the decision being as follows, reversing judgment of Madison Circuit Court:

Complaint of appellee as a shipper against the appellant as a common carrier to recover damages for delay in receiving and transporting certain live stock. Answer, alleging that at the time of the delay complained of the road was prevented from receiving and shipping the stock by a mob, etc.

In cases like the present, for delay in receiving and carrying goods, the carrier is not an insurer, and is bound only by the general rule of liability for a breach of contract, or of his public duty as a carrier, and may be excused for delay in receiving the goods, or in transporting them after they have been received, when the delay is necessarily caused by unforeseen disaster which human prudence cannot provide against, or by accident not caused by the negligence of the carrier, or by thieves and robbers, or an uncontrollable mob.

The fact that a railroad company has reduced the wages of its employes cannot be held to justify or excuse a mob composed of indiscriminate persons in stopping a train of cars and delaying the receiving of goods or the transportation of freight; nor can the railroad company be held responsible for the consequences of such unlawful proceedings, when they cause such delay.

Employees of a road engaging in a strike, after they have refused to work for the company, and have thus severed their connection with the road, are no longer employes, and the company is not responsible for their acts.

Minnesota Railroad Legislation.

Among the laws passed by the last Legislature of Minnesota was one providing that when a railroad is sold under judicial proceedings and bought by a company already organized, the further organization required of the purchasers by the present law may be dispensed with, and it will only be necessary for the company buying the road to file a proper certificate of the facts.

Another law provides that where a proposition for municipal aid to build a road is made by a company in proper form, the municipal authorities must submit the same to popular vote.

Special laws extend the power of acquiring lands by condemnation as provided in the general law to the St. Paul & Duluth and to the Northern Pacific for its leased lines.

Several acts were passed relating to the condemnation of land for railroad purposes. One provides for summary proceedings to establish the validity of condemnation proceedings when the same is questioned. Another amends somewhat the manner of proceeding by commissioners. Another provides for the method of acquiring right of way, etc., over public lands owned by the state. A fourth is apparently intended to provide for the case of roads like the proposed Belt line in Minneapolis and the acquirement of the right to lay spur tracks or sidings over property without acquiring title to the land.

An act extends the privileges of the general law to companies organized under the laws of Illinois upon their complying with the conditions of the general law.

The shortest act of all is as follows:

Section 1.—That when the word "railroad" or "railroads" is used in any general or special law of this state, the same shall be deemed to apply alike to all railroads, without reference to the gauge thereof.

Georgia Tax Suit Decisions.

In its recent decisions on the railroad tax cases the Georgia

Supreme Court, while deciding mainly on technical points and not on the merits of the cases, laid down or indicated several principles, which may be summed up as follows:

Taxation must be general and equal. Where a rate of tax is established by the charter of a railroad, the state can assess only an amount equal to what would be produced by a levy of the general rate of tax on the property, made the same as on all other property. In no case can the general rate assessed on property be exceeded.

Where a charter provides for a tax of "— percentum on the annual income," the word income must be taken as meaning gross and not net income. Net income will not be taken as meant, unless it is so fully expressed.

In the case of a leased road where the charter provides for a tax on income, the tax must be computed on the actual earnings of the road and not on rental received. The lease cannot affect the basis of taxation.

Where a company proceeds to set aside a tax under a certain law, it must first have complied with all the conditions of that law as to making returns, etc. Any lapse will bar it from seeking the remedies provided.

Finally the Court is evidently of opinion that exempting clauses are to be strictly construed. The state will not be held to have surrendered any of its powers of regulation unless it is fully and unmistakably expressed.

THE SCRAP HEAP**Railroad Equipment Notes.**

At the Rogers Works the business is being prosecuted to the extreme extent of their capacity, and engines are being built for the Union Pacific, Central Branch, St. Louis, Kansas City & Northern, Costa Rica, Chicago, Milwaukee & St. Paul, for Brazil, for Connecticut and other Eastern roads, and for several Southern roads. The building of the burned portion of the works is somewhat delayed owing to the non-arrival of the brick, but it is going on, an increased force to be added as soon as the material shall arrive in sufficient quantity to warrant it.—*Paterson (N. J.) Press*.

The Danforth Locomotive Works, at Paterson, are also full of work, with a number of orders to fill.

For four months past the three Paterson shops have shipped 61 locomotives, against 31 in the same time last year. The Pennsylvania Railroad shops at Altoona have orders to build 1,000 freight cars and to make the iron-work for 1,000 more.

J. G. Brill & Co., of Philadelphia, have the following work now in hand: 25 street cars for Germany; 10 for England; 30 for South America; 10 for Spain, and 69 for various places in the United States; 22 narrow-gauge cars for Mexico and 31 for this country and Canada; 8 cars for a one-rail road at Rockaway Beach. This makes 200 cars in all.

The Gilbert & Bush Co., at Troy, N. Y., has just completed two very handsome palace cars for the Quebec, Montreal, Ottawa & Occidental road. They are intended for the special use of the Governor-General, the Marquis of Lorne, and the Princess Louise.

The Jackson & Sharp Co., at Wilmington, Del., has its shops full of work. Besides the large order for the Long Island road, already noted, passenger cars are being built for the Rochester & State Line, the Ulster & Delaware and the Painesville & Youngstown roads, and a number of postal cars to run between Richmond and New Orleans, the joint property of the Richmond & Danville, Atlanta & Charlotte Air Line, Atlanta & West Point, Western of Alabama, Mobile & Montgomery and New Orleans & Mobile roads.

The Lobdell Car Wheel Works, at Wilmington, Del., have more work on hand than for several years past.

The Wason Manufacturing Co., at Brightwood (Springfield), Mass., recently delivered six new passenger cars to the Central Railroad of New Jersey, and is building more for that road and the New Jersey Southern.

Iron and Manufacturing Notes.

The Pittsburgh puddlers' strike has ended in the success of the men, the iron manufacturers giving way and agreeing to pay last year's prices. The strike had extended to the steel works, and most of the manufacturers had large contracts on hand, and, apparently, feared loss of orders to Western makers if the stoppage continued. Work has been generally resumed this week.

Swift's Iron & Steel Works, at Covington, Ky., rolled 1,500 tons of iron rails—30, 35 and 60 lbs. sections—in May, and expect to ship 2,000 tons this month, to five different new roads, in Kentucky, Ohio, Indiana and Missouri. In one day recently they had inquiries for 12,000 tons in three lots.

Hussey, Howe & Co., in Pittsburgh, shipped 140 tons of manufactured steel from their works in one day recently.

The Philadelphia & Reading Rolling Mill, at Reading, Pa., is making 100 tons of iron rails a week. About 900 tons of 45-lb. rails for the Madeira & Mamore road in Brazil are ready for shipment. The work is so pressing that the company is negotiating for the lease of the large rolling mill at Palo Alto, Pa., owned by the estate of Benjamin Hayward.

The old furnace of the Brier Hill Iron & Coal Co., near Youngstown, O., is being repaired and made ready to go into blast.

The Eclipse Windmill Co., at Beloit, Wis., is at work on contracts covering the water supply of 1,000 miles of road. Among other contracts are large ones for the Atchison, Topeka & Santa Fe; St. Paul, Minneapolis & Manitoba; Chicago & Northwestern; Keokuk & St. Louis Line; Central Iowa; Quincy, Missouri & Pacific; Morgan's Louisiana & Texas and others. The company reports increasing demand from foreign countries. Of 140 mills made last month, 20 were exported, and a large Russian order is to be filled this month. A new shop, 50 by 100 ft., is nearly finished and will be used for railroad tanks and fixtures and pumps.

The Canada Steel Co., at Londonderry, N. S., will soon stop its works, in consequence of the refusal of the Intercolonial road to give special rates on coal, ore and iron.

Bridge Notes.

The Keystone Bridge Co., at Pittsburgh, has a number of bridges under way, including the Ft. Snelling (Minn.) highway bridge over the Mississippi and 34 bridges for the Cincinnati Southern road.

The contract for the iron draw-bridge at the city dock, Baltimore, has been awarded to Wendell Bollman, of Baltimore, for \$13,118.

The Louisville Bridge & Iron Co. has lately completed several iron bridges on the Selma, Rome & Dalton road.

The Pittsburgh Bridge Co. has taken a contract to replace all the woodwork of the Niagara suspension bridge with steel, the new work including the floor-beams, etc. No wood-work is to be left about the bridge but the plank flooring of the highway and the ties of the railroad track. The change is expected to reduce the fixed weight of the bridge nearly 200 tons.

Prices of Rails.

Steel rails continue unchanged at from \$42 to \$44 at mill. The only large transaction reported is a sale of 12,000 tons, delivery extending from August to February, at about \$49.50 per ton delivered at St. Louis.

Iron rails continue firm, with a slight upward tendency. One sale is reported of 2,000 tons at a price said to be \$39.50 per ton, free on board, at tide-water. Nearly all the mills are busy.

Old rails are still in good demand and prices are firm, the supply being light. Quotations are unchanged.

Trestle Work.

What is needed at a railroad meeting where stockholders get excited is a chairman with a firm grip of parliamentary law. At a recent annual meeting in Nashua two gentlemen fell to calling each other "liar," "thief" and other pet names, and finally began to pound each other. After several blows had been struck, the chair said that gentlemen must confine their remarks to the question before the meeting, which was the acceptance of the report.

Three locomotive engineers on the North Carolina Railroad are said to be worth over \$25,000 each. Well, North Carolina is an out-of-the-way state, and perhaps the fashion of cutting wages has not reached there yet.

The following red-hot story concerning the Southern Pacific comes from the Prescott (Arizona) Citizen: "The passengers by last night's stage report the track laid 19 miles this side of Maricopa, and work still going on; but it was feared that work would have to stop soon on account of the heat. Already the rails have to be handled with tongs, as grasping them a few times with the hands raises severe blisters."

Railroads are aristocratic. They teach every man to know his station and to stop there.—*Exchange*.

"The driving-wheel of a certain locomotive," said the teacher, "is 17 feet, say. It is 28 miles from Burlington to Mt. Pleasant. Now, if a fly clings to the edge of that wheel, how far does it travel while the engine goes from Burlington to Mt. Pleasant?" Smart bad boy, in tones expressive of supreme disgust, "Twenty-eight miles, in course. What did you give it away for?"—*Burlington Hawkeye*.

"That man is rich," said the conductor. "You know him, then," said a companion. "No, but he groaned when he paid his fare!" "Does every rich man groan when he pays his fare?" "No; but every one who does groan is rich."—*Rochester Express*.

Fast Time on the Erie.

A special train ran over the Erie yesterday, with officials of the Erie, Pennsylvania and Baltimore & Ohio railways. Their destination was Niagara Falls, to attend a meeting held to adjust differences in east-bound freight rates. The train consisted of an engine and two cars, and ran on a special time table. They left Jersey City at 7:26 a. m., and arrived at Niagara Falls at 7 p. m., making the 442 miles between these two stations in 11 hours and 34 minutes, including ten stops of five minutes each. The actual running time was 10 hours and 44 minutes, and the average speed was 41.18 per hour over the entire route.

Following is a detailed statement of the time, stops etc., and will give a clearer idea of the fast time made: The train left Jersey City at 7:26 a. m., stopped at Greenwood on the Eastern Division five minutes for water, and arrived at Port Jervis at 9:55. The time was 2 hours 29 minutes, the running time 2:24, the distance 87 miles, the average speed per hour 36.35 miles. Stopped at Port Jervis five minutes to change engines, five at Calicoon for water, and arrived at Susquehanna at 1 p. m. Running time, 5:34, distance 191 miles, average speed 35.31 miles per hour. Distance over the Delaware Division, 104 miles; average speed, 35.66 miles. Stopped five minutes at Susquehanna for new engine, five at Waverly for water, and reached Hornellsville at 4:33. Running time, 8:17; distance, 331 miles; average per hour, 39.96 miles. Length of Susquehanna Division, 140 miles; running time, 3:23; average speed, 41.38 per hour. Thos. DeWitt was engineer, W. Mack fireman and C. A. Millard conductor; drawn by engine 453. Left Hornellsville at 4:38, stopped to view Portage Falls five minutes, five at Castle to repair feed pipe, five at Attica for water, five at East Buffalo, and arrived at Suspension Bridge at 7 p. m. Running time, 10:44, distance 442 miles, average speed over the entire route, 41.18 miles per hour. Distance over the Buffalo and Falls Divisions, 111 miles; running time 2 hours 2 minutes; average speed, 54.59 miles per hour. Train was drawn by engine 23, Michael Callahan engineer, John Callahan fireman, W. J. Jackson conductor. The 30 miles between Hornellsville and Portage bridge were made in 30 minutes.—*Hornellsville (N. Y.) Times*, June 4.

A Heavy Repair Job.

The Connecticut River Railroad Company has quite a job on hand repairing a culvert in Northfield, two miles below the South Vernon Station and 50 feet below the track. A tunnel 288 feet long is being cut through the embankment, and the earth supported by a wooden framework having a width of 7 feet, which will use up 40,000 feet of lumber. A circular culvert, 3 feet in diameter, will be built inside this frame-work, which will require 100,000 bricks, the intervening space between the brick and woodwork being filled with gravel. A. H. Wright, of Greenfield, has the contract.—*Springfield Republican*, June 9.

Old Locomotives on the Reading Road.

The Philadelphia & Reading Railroad Company, in the statement of locomotives owned contained in its report for 1878, includes six engines over 35 years old. Of these No. 1 weighs 11.8 tons, was built by Brathwaite & Co., London, ran 6,053 miles last year and is still at work on the Richmond coal wharves; in its 41 years' service it has made 310,164 miles. No. 2, also from Brathwaite & Co., weighs 12.1 tons, and is reported as "out of service—to be rebuilt," but it made 3,398 miles last year and has run 334,789 miles since May, 1838. No. 4, built by the New Castle Company in 1842, weighs 13.8 tons and ran 1,628 miles last year, having made but 154,776 miles in its 37 years of life; it is now out of service and to be rebuilt. No. 6, weighing 14.1 tons, built by the Locks & Canals Company, of Lowell, Mass., in 1843, is reported as still in service, assorting cars at Schuylkill Haven; it is credited with 7,138 miles in 1878, and 323,164 miles in all. Nos. 7 and 8, also built by the old Locks & Canals Company in 1843, weigh 14.8 tons each and are credited with 243,849 and 308,785 miles respectively. Both are now out of service, though No. 8 ran 6,155 miles last year.

The highest average mileage per year of any of these engines was 8,850 miles, made by No. 6. Other engines on the road, however, have made a much larger average mileage, the highest among the older engines being that of No. 58, which has averaged 31,823 miles a year. This engine was built at the company's Reading shop in 1859, and last year made 54,600 miles in passenger service on the East Pennsylvania and Lebanon Valley branches.

Favoritism in Appointments.

The following circular was lately sent to all Superintendents, overseers and other officers of the Philadelphia & Reading Railroad Company and the Philadelphia & Reading Coal & Iron Company by President Gowen:

"It has come to the knowledge of the company that in several instances great abuses have existed in the employment of men by reason of favoritism shown by bosses and superintendents to their relatives, to those who may have

given them presents, or those whose nationality, politics or religion is the same as that of their employer; and in one or two cases it has been discovered that superintendents have refused to employ any except those belonging to the same society or lodge as themselves. It is but proper to call the attention of all superintendents and bosses to the fact that the companies know neither politics, sect, religion nor nationality; that every able-bodied man of good moral character, no matter what may be his politics, nationality or religion, is entitled to employment (if there be a vacancy) in the order in which his application is made; and that while the company, in the absence of any improper motive or action on the part of bosses or superintendents, will always sustain the latter in maintaining their full authority over those who are subordinate to them, it will consider it ground for the immediate dismissal of any superintendent or boss who, in any manner, directly or indirectly, receives any presents or other valuable consideration from his employees, or who may be found unjustly discriminating in the employment of men in favor of his own relatives or in favor of any particular party, nationality, religion or association."

OLD AND NEW ROADS.

Atchison, Topeka & Santa Fe and the Denver & Rio Grande.—Recent judicial decisions have not by any means ended the trouble between these companies or the war between them for the possession of the cañon of the Arkansas west of Cañon City. Each company has kept a force in the cañon watching the other for some weeks, besides keeping up a lively fight in the Colorado newspapers.

A dispatch from Denver, Col., June 9, says: "The controversy between the Atchison, Topeka & Santa Fe and the Denver & Rio Grande interests is assuming alarming proportions. The Rio Grande road was leased to the Santa Fe Company six months ago, but the Rio Grande Company has since become dissatisfied with the lease and has sought to break it. The Attorney-General, acting upon information of the stockholders of the Rio Grande, brought suit on the part of the state before District Judge Bower at San Luis, 300 miles south of Denver, for an injunction to prevent the Santa Fe Company operating roads in Colorado. On Saturday Judge Bower took the matter under advisement but afterward granted a preliminary injunction. To-day the Governor received information that the Rio Grande officers had taken possession of the offices of the road at Colorado Springs, and of the coal banks, by an armed force, and had cut the telegraph, etc. He ordered the militia to be in readiness, and the Chaffee Light Artillery, the Governor's Guards and the Mitchell Guards are here waiting instructions. The Rio Grande people deny that there has been any violence."

The latest dispatch received (June 11) is as follows: "The Denver & Rio Grande Railroad Company is running passenger and freight trains between Denver and Pueblo, and has possession of its road south of Pueblo, except at El Moro. The Atchison, Topeka & Santa Fe still holds the buildings at Pueblo and Cañon City with an armed force, and has cut the Cañon Branch. The Denver & Rio Grande Company has made a demand for peaceful possession at Pueblo, and has given the Atchison Company until 10 o'clock to-morrow morning to decide."

Austin, Mankato & St. Cloud.—This company was recently formed by the consolidation of the Austin & Mankato and the Mankato & St. Cloud companies in Minnesota. The projected line is from Mankato, Ia., the terminus of the Illinois Central's Cedar Falls & Minnesota Branch, northwest to Mankato and thence due north to St. Cloud, about 180 miles in all. The new company is reported to be negotiating with the Illinois Central and others for aid in building its road.

Brooklyn & Coney Island Central.—This company has petitioned the city council of Brooklyn, N. Y., for permission to build an elevated steam railroad through certain streets of the city from the Fulton Ferry in a general southerly direction to the Flatbush line.

Buffalo, Chautauqua Lake & Pittsburgh.—A formal re-opening of this line (late the Chautauqua Lake and formerly the Buffalo, Corry & Pittsburgh) took place June 7. The road will be run, as formerly, in connection with the Allegheny Valley and Pittsburgh, Titusville & Buffalo roads. Arrangements have been made to extend the road to Dunkirk from a point near Brocton.

Camden & Atlantic.—The Chancellor of New Jersey has enjoined the authorities of Atlantic City, N. J., from further interfering with the running of trains by this company over the track in Atlantic avenue in that city. The City Council prohibited the running of trains on this track in November last, but will now be unable to prevent it. The track in question is intended for accommodation of passengers, extending from the main depot through the city, so that passengers can be landed at points near all the hotels.

The celebration of the 25th anniversary of the opening of the road, on June 5, was very successful. A large number of invited guests and others was present, and the occasion passed off very pleasantly. A leading feature was a long and interesting address by Mr. R. B. Osborn, the first Chief Engineer of the road, who went over the history of the company and of the building of the road, and traced its gradual development and the growth of Atlantic City. He also recalled many interesting incidents connected with the first opening of the road 25 years ago.

Central, of New Jersey.—Reports of negotiations for a lease of this road to the Philadelphia & Reading Company have been current for the past week in New York. They are now stated by Receiver Lathrop to be entirely without foundation, no proposition looking to a lease having been made by either company.

Chicago & Alton.—It is said that this company has made arrangements to sell \$1,000,000 of the 6 per cent. preferred stock of the Kansas City, St. Louis & Chicago Company, which owns the new extension to Kansas City. The proceeds of this sale are to be used in paying for the completion and equipment of the new line. It is also said that the company intends to issue \$1,000,000 new 7 per cent. bonds secured upon the Glasgow Bridge, to be sold as required. The preferred stock has been taken by parties for sale to investors.

The bridge over the Missouri at Glasgow was formally opened for traffic on June 6. A train from Chicago brought a large number of invited guests, and many people gathered from points along the line of the road. The main bridge consists of three through-spans and five deck-spans of 314 ft. 8 in. each, all of steel; the east approach of two deck-spans of 140 ft. each, and 310 ft. of iron trestle; the west approach of one deck-span of 140 ft., 510 ft. of iron trestle and 880 ft. of wooden trestle. The main bridge is notable as being the first large bridge entirely of steel in America.

Chicago, Milwaukee & St. Paul.—The extension of the Viroqua Branch from Melville, Wis., southward to Viroqua, 21 miles, is now all graded and track-laying has been begun.

Chicago & Northwestern.—At the annual meeting in Chicago last week no change was made except in the anticipated election of three directors to represent the Vanderbilt interest. The statements of the officers showed the gross earnings of the past year to be \$14,582,516; expenses, interest and all charges, \$12,312,663; net balance, \$2,269,853, which is about equal to 7 per cent. on the preferred and 5 per cent. on the common stock.

Chicago & Pacific.—In the United States Circuit Court in Chicago, June 7, an order was entered overruling all the exceptions to the Master's report, approving the report and confirming the sale, but directing the Master not to give a deed of the property until further orders from the Court. The Receiver was also directed to continue in possession of the road for the present. Some of the intervening petitioners took an appeal and asked the Court to grant a *superseas*. The company also prayed for an appeal.

Clarksburg, Weston & Glenville.—The work of laying the track on this West Virginia road was begun last week at Clarksburg. The road will be 25 miles long when completed. It was formerly the Weston & West Fork.

Cleveland & Marietta.—This company has filed articles of incorporation in Ohio covering a road from Marietta on the Ohio River northward to Canton in Washington County, about 115 miles. The capital stock is to be \$4,000,000 and the incorporators are Charles W. West, Isaac Morton, Larz Anderson, Stanley Matthews and William Ramsey. This is probably intended to cover the reorganization of the Marietta, Pittsburgh & Cleveland road and its extension from Canal Dover to Canton to connect with the Valley road.

Cleveland, Tuscarawas Valley & Wheeling.—Work upon the grading of the 65 miles of uncompleted road of this company has been resumed, and promises to be pushed forward without further delay until completed. The contractors advertise for 300 men on the Wheeling or southern end.

Delaware, Lackawanna & Western.—The question of the ferry connection of the Morris & Essex Division with New York is not settled as yet and may not be for some months, as the present contract runs to the close of this year. It is stated that the company has offered to buy the ferries of the Hoboken Land & Improvement Company, which are now used, and that the offer is under consideration. These ferries are profitable, having a large outside business besides the railroad travel, and are operated under an old charter giving exclusive rights. Should the railroad company establish ferries of its own, this charter would prevent it from taking outside business, and limit it to the carriage of its own passengers.

Duncannon & New Bloomfield.—It is proposed to build a railroad from Duncannon, Pa., on the Pennsylvania Railroad, westward to New Bloomfield in Perry County, about 13 miles. It would reach large deposits of valuable iron ore.

Fitchburg.—This company has not yet given formal notice to the state of its threatened withdrawal from the Hoosac Tunnel Line. The Governor and Council of Massachusetts have, however, adopted the following order: "Whereas, complaint has been made by the Fitchburg Railroad Company that it cannot continue to pay the rate of toll which has been in force since July 1, 1877, for the use of the Troy & Greenfield Railroad and Hoosac Tunnel without suffering loss; and

"Whereas, it is desirable and for the public interest that the commercial value of said railroad and tunnel should be demonstrated, and the development of business on the same should be pursued, and that the operation of the line called the 'Hoosac Tunnel Line' should be continued, Ordered, that the manager of the Troy & Greenfield Railroad and Hoosac Tunnel be instructed to propose to the Fitchburg Railroad Company the following plan of adjustment: That three arbitrators be chosen, one to be selected by the Governor and Council, one by the Fitchburg Railroad Company and one by the two so selected. That the present arrangement and tolls for the carriage of freight and passengers of the Fitchburg Railroad Company on the Troy & Greenfield Railroad and Hoosac Tunnel shall remain in force, except that said arbitrators shall consider, and by a majority thereof determine, whether in fairness and justice any allowance in reduction or rebate from the present rate of tolls shall be made from and after July 1, 1879, and if so, what reduction shall be made. Provided, however, that in no case shall such reduction from present rates be so great as to bring the amount of toll paid to the commonwealth below the sum which the commonwealth shall have to pay for salaries and other expenses of operating and maintaining said railroad and tunnel."

Ft. Madison & Northwestern.—Track on this road is now laid from Ft. Madison, Ia., westward about 10 miles to Pitman Creek, where a bridge is all framed and ready to be put up. The track-laying will be pushed as fast as the iron arrives.

Ft. Wayne & Terre Haute.—Arrangements are being made to organize a company to build a narrow-gauge road from Ft. Wayne, Ind., southwest to Terre Haute, about 165 miles. It will be run through a country already well supplied with railroads.

Galveston, Harrisburg & San Antonio.—This company will soon begin work on a branch from Marion, Tex., to New Braunfels, where there is a large German settlement. The distance is about eight miles.

Georgia Tax Cases.—The Georgia Supreme Court has given its decisions on the railroad tax cases argued in October last, which may be briefly summed up as follows:

In the Macon & Augusta case the Court holds that on the facts the charter exemption claimed would not prevent the state from taxing the property. Upon the technical ground that the company did not make the tax return required by law, however, the Court holds that it was not entitled to the statutory remedy as provided, and, therefore, the judgment of the Court below is reversed, with directions that the defendants' affidavit of illegality be dismissed for want of jurisdiction.

In the Rome Railroad case it is held that the correct mode of taking the property of said company under existing laws is to estimate the whole property at its true value; upon so much of this value as equals the amount of capital stock actually paid in, assess at the charter limit (thirty-one and a quarter cents on every hundred dollars) and upon the balance of such value, if any, assess at the general rate. Whenever the charter limit exceeds the general rate, the latter should be levied upon the whole value, the limit of the charter being then immaterial.

In the Georgia Railroad case it is held that the state cannot assess a tax greater than the charter limit, which is 1½ per cent. on the net earnings. In this case, however, the company, having made no return, is barred from proceeding to set aside the tax on affidavit of illegality and the bill

is dismissed. Proceedings by injunction in equity would have been the proper remedy.

In the Southwestern Railroad case again it is held that the company was barred from proceeding by affidavit of illegality by its failure to make a proper return, and the decision is reversed, with directions to dismiss the bill. The Chief Justice dissented, on the ground that the Comptroller had given no proper notice to the company, and had not called its attention to the law or the necessity of making a proper return.

The Central Railroad case is decided in the same way. Incidentally, however, the Court states that the correct mode of taxing all the property of this company under existing laws, is first to estimate its railroad and appurtenances, including the branches, other than that portion which was formerly the Macon & Western Railroad, at their true value, and to assess upon the same such percentage as will yield a revenue to the state equal to ½ of 1 per cent. upon its net annual income. If, however, this should exceed the general rate of taxation, then assess at the general rate, as in no case is the rate *ad valorem* imposed generally to be exceeded. Secondly, estimate all other property of the company, including the Macon & Western Railroad, at its true value, just as if it belonged to a natural person, and upon this value assess at the general rate.

The Augusta & Savannah case again is decided on the technical point that the company made no return and is therefore barred from proceeding. In all these cases the remedy by proceeding in equity for injunction would have been the proper one.

It will be seen that nearly all the cases are dismissed on technical grounds without decision on the merits of the cases.

Illinois Central.—For the month of May the traffic on the lines operated by this company was as follows:

	1879.	1878.	Decrease.	P. c.
In Illinois.....	\$433,190	\$465,272	\$32,082	6.9
In Iowa (leased lines).....	127,599	143,255	15,656	11.0
Total.....	\$560,789	\$608,527	\$47,738	7.8

During May, 1879, the land sales were 405.83 acres for \$2,760.73, and the cash collected on land contracts was \$4,346.68.

Surveys and estimates are being completed for the proposed extension of the Chatsworth Division to Strawn, and it is said that work will soon be begun.

Local papers state that the right of way is being secured for the Kankakee & Western road, which is to run from Kempton on the Chatsworth Division across to Minonk on the North Division, and it is thought that the line will be built this season.

A survey is to be made for a branch about 12 miles long, from Buckingham on the Chatsworth Division to several coal mines in Essex, Kankakee County, Ill.

Kansas Pacific.—Leavenworth dispatches state that Judge C. G. Foster, in the Circuit Court of the United States at Leavenworth, has granted the decree for the foreclosure of the Denver Extension mortgage. After the payment required by the agreement between the company and the Denver Extension bondholders shall have been made, the property will be conveyed to the company without any sale. The bondholders are secured, however, in their right, in case of any failure to carry out the agreement on the part of the company.

The *American Exchange* says: "Under the agreement referred to above, there have been deposited with the United States Trust Co. \$1,053,938 for interest due, and \$125,000 to be used in part payment of legal and other foreclosure expenses. The money was deposited by the Kansas Pacific pool, composed of Mr. Jay Gould, Mr. Russell Sage and others, which now controls the Kansas Pacific Company. Payment will probably be made next week, when the certified copy of the foreclosure decree arrives from Kansas. In order to cover the expenses of reorganization not provided for by the \$125,000, an assessment will be levied of 1 per cent., or \$10 on each \$1,000 Denver Extension bond, with the coupons and interest certificates attached to it, exclusive of interest certificates 'A' and 'A A.' The amount of cash payment for back interest on each \$1,000 bond, with its unpaid and unfunded coupons, and the \$87.50 interest certificate going with it, will be \$152.62. Deducting the \$10 assessment, \$142.62 is the amount of net cash left to be paid over. The holder of the interest certificates 'A' and 'A A' will also be subject to an assessment of 1 per cent. On each of these certificates for \$5 each there will be payable \$6.30 for back interest, from which the assessment, amounting to 41 cents, being deducted, there will remain \$5.89 net cash to be paid."

Keokuk, Iowa City & Minnesota.—The people of Keokuk, Ia., have voted by a considerable majority to levy a 2 per cent. tax in aid of this projected road.

Lake Shore & Michigan Southern.—The following General Order (No. 172) has been issued by Charles Paine, General Superintendent, directed "to all locomotive engineers running in the state of Indiana."

"You will take notice of and obey the provisions of the act approved March 29, 1879, of which the first two sections are printed below for your information."

"Section 1.—Be it enacted by the General Assembly of the state of Indiana, That it shall be the duty of all railroad companies operating in this state to have attached to each and every locomotive engine a whistle, such as is now in use, or may be hereafter used by all well-managed railroad companies, and the engineers or other persons in charge of or operating such engine upon the line of any such railroad shall, when such engine approaches the crossing of any turnpike or other public highway in this state, and when such engine is not less than eighty, nor more than one hundred rods from such crossing, sound the whistle on such engine attached thereto, continually, from the time of sounding such whistle until such engine shall have fully passed such crossing:

"Provided, That nothing herein shall be so construed as to interfere with any ordinance that has been or may hereafter be passed by any city in this state, regulating the management or running of such engine or railroad within the limits of such city."

"Section 2.—That every engineer or other person in charge of or operating any such engine, who shall fail or neglect to comply with the provisions of Section one (1) of this act shall be held personally liable therefor to the state of Indiana, in a penalty of not less than ten (10) dollars, nor more than fifty (50) dollars, to be recovered in a civil action, at the suit of said state, in the Circuit or Superior Court of any county wherein such crossing may be located, and the company in whose employ such engineer or person may be, as well as the person himself, shall be liable in damages to any person or his representatives who may be injured in property or person, or to any corporation that may be injured in property by the neglect or failure of such engineer or other person as aforesaid."

Lehigh & Wilkesbarre Coal Co.—The report of Joseph A. Clay, Master, in the case of the Central Railroad of New Jersey against the Lehigh & Wilkesbarre Company has just been issued. The Master reports that on Feb. 12, 1877,

a bill in equity was filed by the Central Railroad Company of New Jersey, on behalf of all the holders of the mortgage bonds of the corporation defendant against the Lehigh & Wilkesbarre Coal Company, praying, among other things, for the appointment of a receiver. The bill set forth that the defendants were owners and lessees of 84,000 acres of coal lands, having 37 slopes and 30 shafts, or 50 openings in all, which supplied 20 breakers, with an annual capacity of product on of 4,000,000 tons of coal; that the said property cost upward of \$20,000,000, and was intrinsically worth a much larger sum, but that the company had in the last few years shared in the losses common to all miners of anthracite coal, and had met with other losses, until on April 27, 1874, the company mortgaged their property to the Fidelity Insurance Trust & Safe Deposit Company, of Philadelphia, issuing bonds to the extent of upward of \$10,000,000 under this new mortgage. The Central Railroad owned two-thirds of the capital stock of the Lehigh & Wilkesbarre Coal Company, besides being the owners of a large number of the bonds, the payment of which they had guaranteed. They also sold and pledged large amounts of the same, and in addition to the mortgage loan the defendants owed other mortgage debts to the amount of upward of \$3,000,000, a floating indebtedness of \$6,000,000 and upward, including \$300,000 to miners for wages, \$200,000 for taxes, and about \$1,500,000 to the complainants for freights and tolls. These bonds and other securities of the defendants being pledged as security for the debts of both complainants and defendant at much less than their par or real value, and the defendants being insolvent and there being danger of the securities selling at a loss, the application for a receiver was made and granted by the Court, and Mr. Clay was appointed Master in the case.

The report cites a number of settlements made by the Master, and shows the cash receipts of the Receivers from February, 1878, to January, 1879, to have been \$10,070,061.12, and the disbursements \$9,965,423.37, leaving a balance of \$104,637.75. The floating debt has been reduced from \$6,306,654.79 to \$4,660,827.58, and it is expected that a large amount of this will be settled under an arrangement with the Central Railroad Company, leaving about \$400,000 to be arranged hereafter. The Master concludes by stating that there is every reason to believe that within a comparatively short space of time, both of these great corporations will be restored to the management of their stockholders.

Lockport & Buffalo.—This road was formally opened for travel June 5 by an excursion over the line, in which a large number of people joined. The road extends from Lockport, N. Y., southwest to Tonawanda, 12 miles, connecting there with the Erie branch from Buffalo to Suspension Bridge. It is to be operated by the New York, Lake Erie & Western Company. The road has been under construction some time, its completion being delayed by tedious litigation about the crossing over the New York Central track at Tonawanda.

Long Island.—With the approval of the Supreme Court, Receiver Sharpe has concluded an agreement with the Brooklyn, Flatbush & Coney Island Company, by which the Long Island Company is to have the right to run trains over that road to Coney Island, paying therefor 33½ per cent. of gross receipts on all business done between Long Island City (Hunter's Point) and Coney Island, and 35 per cent. on all business done between Bushwick and points east of Jamaica and Coney Island. The Brooklyn, Flatbush & Coney Island Company also secures the right to run trains on the Long Island track between Bedford and Flatbush avenues, paying 20 per cent. of the gross earnings on business done.

Louisville, Cincinnati & Lexington.—A dispatch from Louisville, Ky., June 4, says: "A local syndicate was consummated yesterday for the purpose of controlling the stock of the Louisville, Cincinnati & Lexington, or Short Line Railroad, as it is best known. They have nearly \$800,000 of preferred stock, and \$395,000 of common. This is about 60 per cent. of the whole issue, and the members are bound among themselves not to sell until it shall go above par. The preferred stock is now worth 49. There was a sale of the common stock recently at 25. The *Courier-Journal* expresses the opinion that the object of the syndicate is to prevent the Chesapeake & Ohio Company from acquiring control of the property by purchasing the stock, a majority of which would now cost about \$750,000."

Mayville, Fair Point & Point Chautauqua.—This company has been organized to build a railroad around the head of Chautauqua Lake from Fair Point, N. Y., to Point Chautauqua. It will cross the Buffalo, Chautauqua Lake & Pittsburgh road at Mayville, and is to be built and worked in the interest of that road. The work will be begun at once.

Milwaukee, Lake Shore & Western.—This company has begun running Sunday excursion trains at low rates between Milwaukee and Sheboygan. It is also cultivating the special excursion travel, with prospects of a large business this summer.

Minneapolis & Northwestern.—This company requests correspondence with contractors as to the building of some 250 miles of narrow-gauge road in Minnesota, 60 miles of which are now located and ready to be put under contract. The company desires to make arrangements for paying part of the cost of building in bonds. Letters may be addressed to W. W. Eastman, Chairman Executive Committee, Minneapolis, Minn.

A split has taken place in the company, J. B. Bassett and others claiming to be stockholders having elected a board of directors and officers on their own account. They are not recognized by the majority of the subscribers, and the original officers are in possession of the books and other property.

Minneapolis & St. Louis.—It is stated that this company has completed arrangements to build an extension from Albert Lea, Minn., southwest to Ft. Dodge, Ia., about 100 miles. One of the objects of the extension is to reach the Iowa coal fields.

Minnesota & Black Hills.—This company has been organized to build a railroad from some point on the Sioux City & St. Paul in Jackson County, Minn., northwest and west to the Dakota line, about 70 miles. The capital stock is \$1,200,000. Most of the incorporators are connected with the St. Paul & Sioux City Company. The intention is to connect at the state line with a road to be built in Dakota.

Missouri Pacific.—Messrs. E. D. Morgan and Joseph Seligman, trustees, give notice that they will receive at the office of J. & W. Seligman, New York, until June 18, sealed proposals for the sale to them of second mortgage bonds of this company to the amount of \$50,000. Bonds must be offered in accordance with the conditions of the mortgage.

New Castle & Franklin.—Acting under instructions of a majority of the bondholders, Alexander Bradley, Trustee, recently took formal possession of this road, and proceedings are now pending for a sale of the road under the mortgage. The road extends from New Castle, Pa., north by east 36

miles to Stoneboro, on the Jamestown & Franklin Branch of the Lake Shore road, and its stock is chiefly held in New Castle and the neighborhood. Its bonded debt is \$800,000. It is said that arrangements have already been made for its purchase in the interest of the Pittsburgh & Lake Erie road.

Northern Pacific.—A dispatch from Bismarck, Dakota, June 5, says: "President Billings and the other gentlemen who subscribed liberally to the recent loan of \$2,000,000 to the Northern Pacific Railroad, after an inspection of the extension west of the Missouri, find it progressing too slowly, and will take steps to hasten its completion, and if possible build the entire road to the Yellowstone this year. The contractors, Joseph Bellows, Jarvis Lord and Walker & Clark, took the grading at 15 cents per yard, and it is being sub-let at 13 cents, which, it is said, is too low, and if the company wants the work completed this summer it will have to do so itself. It is thought that Vice-President Stark will be made General Manager of the road. With the completion of the division of the Yellowstone and the Pend'Oreille Division on the Pacific Coast, President Billings proposes to establish a stage line between the terminal points; and thus provide for through travel and a mail route."

North Wisconsin.—The section of 20 miles completed last year was recently inspected by the state officers of Wisconsin preparatory to the issue of land-grant certificates. The company is making preparations to build another section of 20 miles this season. It must be completed this year, to comply with the terms of the land grant.

Ohio & West Virginia.—This company was organized some time ago by parties who had purchased the road-bed and right of way of the unfinished Columbus & Gallipolis road at foreclosure sale. The recent annual election showed that control of the company had been secured by persons interested in the Columbus & Hocking Valley road, and now amended articles of incorporation have been filed, fixing the northern terminus at Logan, O., instead of Columbus. This will make the road, if built, a branch or extension of the Hocking Valley road, instead of a competing line. The amended articles also change the Ohio River terminus from Gallipolis to Pomeroy.

Philadelphia & Reading.—A line has been located for a connection between the Germantown Branch of this road and the lately-leased North Pennsylvania line just outside of Philadelphia. It leaves the Germantown Branch at Wayne Station, and runs northeast 1½ miles to Tabor Station, on the North Pennsylvania, the line being direct and also located so as to avoid buildings and improved property as much as possible and reduce the cost of right of way. It will be generally above the level of the neighborhood, and most of it will be built at first on trestle-work, to be filled in hereafter. It will have a double track and but two curves, one at each end. There will be four bridges, three over highway roads and one over Wingohocking Creek, the last being 45 feet above the creek. The only building required will be a new transfer station at Wayne.

The object of the connection is to enable the trains on the New York & Philadelphia New Line to run directly to the Germantown Branch station at Ninth and Green streets, which is very conveniently situated for Philadelphia city travel. By putting in a connection between the Germantown and Richmond branches at Nicetown Summit, it can also be used as a line by which coal trains can be sent from the main line of the Reading to the North Pennsylvania without going into the city.

This company will pay its employees their wages for April and May in wages-certificates, bearing 6 per cent. interest, payable in cash Oct. 1, but receivable at any time in payment of freight charges or other debts due the company. The amount required will be about \$700,000. Of the \$1,591,260 of similar certificates issued for the same purpose last fall, \$1,523,290 have already been redeemed, leaving but \$67,970 outstanding. The use of these certificates is made necessary by the heavy interest and rental payments falling due in June and July, amounting to \$2,104,740, to be paid in cash.

A recent circular announces that the new leased lines—the North Pennsylvania and the Delaware & Bound Brook—will be known hereafter as the North Penn & Bound Brook Division of this road. The line from Philadelphia to Bethlehem will be called the Bethlehem Branch of this division, and that from Jenkintown to Bound Brook the New York Branch.

Pontiac, Oxford & Northern.—This company has been organized and has ordered a survey made of a line from Pontiac, Mich., northward to Oxford, about 15 miles.

Port Huron & Northwestern.—This road is now completed to Crosswell, 28¼ miles north by west from Port Huron, Mich., and 4¼ miles beyond the late terminus. Intermediate stations are North Street, Grand Centre, Jeddo and Amadore.

Portland & Ogdensburg, Vermont Division.—The Receivers give notice that they will receive proposals until June 17 for the following work: About 600,000 cubic yards earthwork; about 5,000 cubic yards bridge masonry; about 8,000 cubic yards culvert masonry; about 4,000 cubic yards paving, and about 120,000 cubic yards ballasting. All of this work, except the ballasting, is to take the place of trestle-work. Information concerning plans, specifications, terms of payment, etc., can be had on application to A. B. Jewett and A. W. Hastings, Receivers and Managers, at St. Johnsbury, Vermont.

Profile & Franconia Notch.—This road has now all the track laid and will be opened for business June 20. It is of 3 ft. gauge and 9¼ miles long, extending from the Boston, Concord & Montreal at Bethlehem, N. H., southeast through the famous Franconia Notch to the Profile House. In that distance it rises 780 feet, an average grade of 80 feet to the mile, and three miles have a grade of 116 feet to the mile. It is built chiefly for summer travel, but is expected to have considerable traffic in lumber. It will probably be operated only in summer. The fare over the road is to be \$1.50 for the round trip, or eight cents a mile, but is nevertheless 40 per cent. lower than the stages have charged for the trip.

Prospect Park & Coney Island.—This company has completed a branch or extension from its Coney Island terminus at West Brighton Beach westward to the steamboat landing at Coney Island Point. It is about 1½ miles long, and was opened for business June 8.

Quincy, Missouri & Pacific.—A dispatch from Quincy, Ill., June 7, says that the negotiations which have been some time in progress have resulted in an agreement for the lease of this road to the Wabash Company for 99 years. The company is to complete the extension now under construction to Milan, Mo., 20 miles westward from the present terminus at Novinger. The lessee is to extend it some 70 miles further to a connection with the St. Louis, Kansas City & Northern's Omaha Extension near Albany.

Ripley, Wilmington & Dayton.—Articles have been filed covering a branch of this projected road from Buford, Highland County, O., to Aberdeen in Brown County, about 15 miles.

Rochester, Lakeville & Almont.—The preliminary survey of this projected line from Rochester, Mich., to Almont has been made. The engineer reports that the distance is 19¼ miles, the steepest grade 7½ feet, except the first half mile out of Rochester, which is 115 feet, but this can be lessened by going around the bluff. The estimated cost is \$80,000 for construction and equipment.

St. Cloud, Grantsburg & Ashland.—This road is now graded nearly all the distance from Grantsburg, Wis., westward to the St. Croix River, some 45 miles.

St. Joseph & Des Moines.—Track on this road is now laid to King City, Mo., seven miles beyond the late terminus at Union Star and 32 miles northeast from St. Joseph. Trains run through to the new terminus.

St. Paul & Chicago.—This company has been organized by parties interested in the River Falls road for the purpose of extending that road from River Falls, Wis., to the southern line of the state by a route not definitely located as yet.

Sandy River.—A contract has been let to T. & R. Shanahan, of Portland, Me., for building 18 miles of this road from Farmington, Me., the terminus of the Maine Central's Androscoggin Division, northwest to Phillips. The road is to be of 2 ft. gauge and is intended to run hereafter through to the Rangeley Lakes, a noted sporting resort.

The Maine Railroad Commissioners have recently approved the organization of the company and granted the necessary certificate.

San Francisco & North Pacific.—This company has opened for traffic the San Rafael Branch of its road, the track on which was laid last year. It is 25 miles long, leaving the main line at Petaluma, Cal., eight miles north of its San Francisco Bay terminus at Donahue, and running west and south along Petaluma Creek and by a tunnel through the Coast Range to San Rafael, also on the bay, and the terminus of the North Pacific Coast road. The intermediate stations are Novato Junction, Pacheco, Miller and Grand Avenue. The new line was begun by the Sonoma & Marin Company, which afterward sold out to the present owner. The company will maintain its present ferry between Donahue and San Francisco, and has also arranged to use the North Pacific Coast Company's ferry between San Rafael and San Francisco.

Selma, Rome & Dalton.—A correspondent writes as follows: "This road is being thoroughly rebuilt and repaired, and is now in first-class order. The construction of bridges is under the direction of Messrs. Trafton, of Louisville, Ky., and O'Brien, of Knoxville, Tenn., two of the most competent civil engineers in this country. All portions of the track that required renewing have recently been relaid with 1,000 tons of new rails. New iron bridges have been completed over Hurricane and Silver creeks. New bridges have also been lately constructed at Parham's (over Big Mulberry), Salt Creek, Nance's Creek, Terrapin, Little Cedar, Etowah River, Oostanaula River and Snake Creek. A new iron bridge is in course of construction across Coosa River, one span being already complete, and another of the same design is being built at Big Cedar River. The Louisville Bridge & Iron Company, also Edington Brothers, of Knoxville, with large forces have been in the employ of the company for several months, besides a large bridge force belonging to the road under the charge of D. E. Buckley. The management of this road has worked with untiring energy, and has succeeded in putting the entire line in the very best of condition."

Southern Fast Mail Route.—From July 1 the roads interested will run fast double daily mail trains between New York and New Orleans. The route south of Richmond will be over the Richmond & Danville, the Atlanta & Charlotte Air Line, the Atlanta & West Point, the Western, of Alabama, the Mobile & Montgomery and the New Orleans & Mobile road. Through sleeping cars will be run in connection with these trains between Richmond and New Orleans.

Southern Minnesota.—This company is building an extension about three miles long from La Crescent Junction, Minn., northward to a connection with the Chicago, Milwaukee & St. Paul tract near the west end of the bridge over the Mississippi just above La Crosse. The new track is parallel to that of the Chicago, Clinton, Dubuque & Minnesota, which is now used in making the connection. The work will soon be finished.

Spartanburg & Asheville.—Track is now laid to Hendersonville, N. C., 40 miles from Spartanburg, S. C., and six miles beyond the late terminus at Flat Rock. The first through train ran into Hendersonville June 2. This extension has been built by the Receiver, under direction of the Court. The line from Spartanburg covers some very heavy work through a mountainous country, and at Face's Gap crosses a high ridge with a grade of 237 feet to the mile and 1½ miles long. The 19 miles from Hendersonville to Asheville are comparatively easy work, and will be built by the Receiver, if the Court will give permission.

Springfield, Jackson & Pomeroy.—The Horse Creek Branch of this road is now completed and opened for business. It is built to reach some coal mines, and is two miles long, from Jackson, in Jackson County, O., to Eurekaville.

Tampa, Peace Creek & St. Johns River.—Armstrong, Van Fleet & Co., contractors for this road, whose address is Room No. 20, Maine Bank Building, Chicago, Ill., desire to build some 200 miles of this projected Florida road, beginning at Tampa Bay, making part payment to sub-contractors in lands granted to the company. The estimated cost of construction is \$3,500 per mile; it is to be of 3 ft. gauge, rails 24 lbs. to the yard, through a country where ties are abundant and the work generally light.

Upper Arkansas, Leadville & Malta.—This company has filed articles of incorporation in Colorado for a narrow-gauge road from Leadville by Evans Gulch to Tabor on the Arkansas, with branches and spurs up Big Evans Gulch; up Stray Horse Gulch; to Park City; to Malta, and to the Carbonate Mine. Its object is, apparently, to connect the chief mines of the Leadville Region with each other and with any road that may reach Leadville. The capital stock is to be \$200,000.

Western of Minnesota.—Notice is given that C. Tower and J. Frailey Smith, trustees, will receive at No. 228 South Seventh street, Philadelphia, until July 8, proposals for the sale to them of 10 bonds of the series of \$100,000 secured by the land-grant mortgage of this company.

Western Union Telegraph.—The following statement is made for the quarter ending June 30, the June earnings estimated:

Surplus April 1.....	\$545,022 47
Net earnings for quarter.....	1,103,002 98
Total.....	\$1,648,025 45
Interest, sinking fund and construction.....	277,088 08
Surplus.....	\$1,370,937 37
From this surplus a quarterly dividend of 1½ per cent.,	

instead of the usual 1½ per cent, was declared. It was also resolved to divide from the stock held by the company enough to make a stock dividend of 17 per cent.

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Nashua & Lowell.

This company owns a line from Lowell, Mass., to Nashua, N. H., 14.5 miles, all double track; it leases the Stony Brook road, from Chelmsford, Mass., to Ayer Junction, 15.5 miles; the Wilton road, from Nashua to Wilton, 13 miles, and the Peterboro road, from Wilton to Greenfield, 10.5 miles, making 53.5 miles in all. The lease of the Peterboro road is in dispute, as explained below. The report is for the year ending March 31, 1879.

Up to Dec. 1, 1878, the road was worked jointly with the Boston & Lowell under a contract which had lasted over 20 years, by which the roads were worked as one and the earnings divided, 31 per cent. to this road and 69 to the Boston & Lowell. Since Dec. 1, 1878, the road has been worked independently by this company.

The balance sheet, condensed, is as follows:

Stock (\$55.172 per mile).....	\$800,000.00
Bonds (\$13.793 per mile).....	200,000.00
Notes payable.....	213,000.00
Unclaimed dividends.....	715.00
May dividend.....	24,000.00
Joint roads, two months rent Peterboro road.....	5,712.00
On account current earnings after April 1.....	12,000.00
Contingent fund.....	126,100.32
Total.....	\$1,381,527.32

Road, etc. (\$63,057 per mile).....	\$927,377.09
Mystic River Quay, Boston freight house, etc.....	280,267.73
Due from joint roads.....	23,694.76
Due from Boston & Lowell Co.....	7,044.50
Sinking fund, O. & L. C. bonds.....	3,265.13
Cash and bills receivable.....	132,949.11
Total.....	\$1,381,527.32

The earnings for the year were as follows:

	Eight months or joint acc't.	Four months, separate.	Total.
Passengers.....	\$149,822.23	\$39,474.93	\$189,297.16
Freight.....	177,395.78	52,675.04	230,070.82
Express, mail, etc.....	10,815.40	3,334.57	14,150.03
Total.....	\$338,033.41	\$95,484.54	\$433,518.01
Expenses.....	239,804.96	50,127.54	289,932.50
Net earnings.....	\$98,228.51	\$36,357.00	\$134,585.51
Gross earn. per mile.....			\$8,103.14
Net.....			2,515.02
Per cent. of exps.....			88.90

As compared with the previous year, entirely on joint account, there was a decrease of \$71,538.73, or 14.2 per cent., in gross earnings; of \$40,978.96, or 12.1 per cent., in expenses, and of \$30,559.76, or 18.5 per cent., in net earnings.

The income account was as follows:

Net earnings, as above.....	\$134,585.51
Rents received.....	2,439.13
Joint account for Peterboro R. R. rental.....	5,712.00
Due from Boston & Lowell, rents from Boston freight house, etc.....	4,701.25
Total.....	\$147,437.89

Joint rental account, eight months.....	\$60,936.34
Interest on bonds and floating debt.....	20,021.05
Rent Wilton R. R. one year.....	14,130.00
Rent Stony Brook R. R. four months.....	6,100.00
Rent Peterboro R. R. 31 per cent., six months.....	5,312.16
May dividend.....	24,000.00
Sundry and miscellaneous expenses.....	5,969.45
Total.....	136,488.90

Balance..... \$10,948.99

Several matters belonging to the joint account of the two roads are still in dispute. The lease of the Peterboro road, it is claimed, was only authorized to be made on joint account, and the directors have therefore refused to pay more than 31 per cent. of the rental. The Peterboro Company has brought suit to enforce this claim and has refused all offers of a compromise.

The suit to recover some \$200,000 claimed to have been wrongfully withheld from the joint earnings to pay interest on the cost of the Boston passenger station and other improvements, the property of the Boston & Lowell Company, has not been pressed, the directors preferring to submit the matter once more to the stockholders.

Complaint is made that the Boston & Lowell charges this company upon its Boston business rates 50 per cent. higher than it charges on through business from the upper roads. An application to the Massachusetts Railroad Commission,

having failed to secure relief, the directors hope to find some other way of avoiding payment of the heavy tribute.

The Manchester & Keene road, in which this company owns an interest, is now in good order for 5½ miles, from Greenfield to the junction of the Peterboro & Hillsboro road. It will require about \$25,000 to make the rest of the road fit for traffic, and it is hoped that this will be done shortly.

It is believed that the road will be able to earn satisfactory dividends, if fair treatment can be secured from connecting lines. One dividend of 3 per cent. has been paid since the close of the fiscal year.

Boston, Concord & Montreal.

This company owns a line from Concord, N. H., north by west to Woodville (Wells River) and thence northeast to Groveton Junction, on the Grand Trunk, 145 miles, with a branch from Wing Road by Fabyan to Mt. Washington, 22 miles, making 167 miles in all. Its report is for the year ending March 31, 1879.

The equipment consists of 30 locomotives; 25 passenger, 2 drawing-room and 16 mail and baggage cars; 572 freight cars. This is an increase of one baggage car and a decrease of eight freight cars from the previous year.

The general account is as follows:

Stock, old dividends, etc.....	\$459,600.00
Stock, new.....	540,400.00
Stock, preferred.....	800,000.00
Total stock (\$10.778 per mile).....	\$1,810,000.00
Bonds (\$15.133 per mile).....	2,527,200.00
Coupons and dividends unclaimed.....	12,907.39
Profit and loss.....	582,485.09
Total.....	\$4,922,592.48
Road and extensions (\$25,892 per mile).....	\$4,319,000.00
Trustees of sinking fund.....	201,500.00
Pennegrasset House.....	16,000.00
Fuel, materials, Gen. Manager's balance.....	192,631.12
Cash for coupons, etc., unpaid.....	12,907.39
Cash and bonds on hand.....	180,553.97
Total.....	4,922,592.84

The bonded debt was reduced \$800 during the year; it consists of \$25,700 bonds due in 1885; \$156,500 due in 1875; \$624,000 due in 1889, and \$1,721,000 consolidated bonds due in 1893. During the year the company has disposed of the consolidated bonds to the amount of \$243,000, which have been applied to take up a portion of the over-due bonds of 1865 and 1875. Of the sinking fund bonds there are now outstanding but \$292,000, on which interest is paid, the company holding \$116,000 and the trustees of the fund \$306,000. Of the outstanding bonds of 1865 and 1875, as appears in the trial balance, the company has paid for and is carrying \$147,500, leaving a balance of \$34,700 to redeem. The yearly charge on the bonds upon which interest is paid is thus \$117,962, or \$706.86 per mile.

The earnings for the year were as follows:

	1878-79.	1877-78.	Inc. or Dec.	P. c.
Passengers.....	\$243,451.90	\$257,465.42	D. \$14,013.48	5.4
Freight.....	315,734.40	307,270.42	D. \$8,463.98	2.7
Mail, express, etc.....	31,364.07	29,536.39	I. 1,827.68	6.2
Total.....	\$590,550.40	\$594,272.20	D. \$3,721.71	0.7
Expenses.....	388,931.88	453,171.84	D. 64,239.96	14.2
Net earnings.....	\$201,618.51	\$141,100.36	I. \$60,518.15	42.9
Gross earnings per mile.....	3,536.23	3,917.80	D. 381.57	9.7
Net earn. per mile.....	1,247.30	1,204.19	I. 43.11	3.6
Per cent. of exps.....	65.86	69.23	D. 3.37	4.9

The loss in gross earnings was mainly due to the reduction of freight by general depression in business; it was more than met by the large decrease in expenses.

The road and equipment were kept in good condition; 200 tons steel rails, 550 tons iron rails, 3,000 Fisher & Norris rail joints and 73,869 new ties were used in renewal of track, and 60,000 cubic yards of ballasting were put in where most needed.

Relations with connecting roads continue good. No new contracts have been made, but under temporary arrangement a new through line between Portland, Me., and Burlington, Vt., has been established over this road, the Portland & Ogdensburg, the Montpelier & Wells River and the Burlington & Lamoille. It promises to be profitable, and will probably be continued.

The directors' report says: "It would have been a source of gratification to the directors to have been able to have brought the proposed consolidation of the different classes of stock to a conclusion during the year; but it was found that in consequence of the continued depression of business and the diminished receipts, that it would have been impossible to have paid a dividend on the consolidated stock at the rate upon which the basis of consolidation had been proposed, and the directors feel reluctantly compelled to ask the stockholders to still further delay the accomplishment of a result so desirable for the stockholders and so important for the interests of the road; the more favorable indications of the business for the next year, and in the future, lead them to believe that this result need be delayed but a short time longer. The same reasons that have interfered to delay the proposed consolidation of stock have also operated to prevent the commencement of the extension of the road beyond Groveton toward Colebrook; the directors believe that this delay will be but temporary, and that the interests of the stockholders will be subserved and the convenience of the public promoted by an effort to construct this portion of the chartered route of the road as soon as the increase of business and the relief from the present depression will justify the necessary expenditures."

Boston & New York Air Line.

This company, successor through foreclosure to the New Haven, Middletown & Willimantic, owns a line from Willimantic, Conn., to Cedar Hill Junction in New Haven, 50 miles, and leases the Colchester road, a branch 3½ miles long to Colchester. It uses the New York, New Haven & Hartford track from Cedar Hill Junction into New Haven, 2½ miles. Its report is for the year ending April 30, 1879.

No general balance sheet and no statement of capital account is given. The traffic of the road is not stated.

The earnings for the year were as follows:

	1878-79.	1877-78.	Inc. or Dec.	P. c.
Gross earnings.....	\$267,644.40	\$265,925.70	I. \$1,718.70	0.6
Expenses.....	178,870.12	168,443.22	D. 10,426.90	5.1
Net earnings.....	\$88,774.28	\$97,482.48	D. \$8,708.20	9.3
Gross earnings per mile.....	5,092.70	5,138.06	D. 45.36	0.9
Net earnings per mile.....	1,659.33	1,497.25	I. 162.08	10.8
Per cent. of exps.....	66.83	70.86	D. 4.03	5.7

The Colchester road was worked only about half the year in 1877-78.

There was expended during the year \$23,905.07 for new construction and equipment, in addition to the working expenses. The chief items were \$9,641.28 for bridge masonry and \$7,696.68 for steel rails. There were 300 tons new steel rails laid.

The through Boston-New York passenger train was taken

off in November and the through freight Feb. 1. At the latter date the pooling arrangement with the New York, New Haven & Hartford took effect. The terms of this agreement have been already noted. Briefly it gives this company 6 per cent. of the gross earnings of both roads and restricts it to the local business entirely.

The report recommends this agreement to the stockholders (it has now been ratified) as advantageous to their interests. The share of gross earnings will be nearly the same as now earned, and the expenses much less, particularly as the road will be relieved from the burdensome terminal charges at New Haven. For the three months of the fiscal year worked under this agreement the earnings were \$59,869.81; expenses, \$25,220.51; net earnings, \$34,649.30. It is believed that under this agreement the company will be able to pay dividends on its preferred stock.

Baltimore & Potomac.

This company owns a line from Baltimore to Washington, 43 miles, with a branch from Bowie, Md., to Pope's Creek, 49 miles, making 92 miles in all. Its entrance into Baltimore and connection with the Northern Central in that city are by a tunnel and other heavy works, which have made it a very costly road. It is controlled by the Pennsylvania, and its bonds are guaranteed jointly by that company and the Northern Central.

For the year ending Dec. 31 the earnings were as follows:

	1878.	1877.	Inc. or Dec.	P. c.
Gross earnings.....	\$630,076.54	\$646,322.78	D. \$16,246.24	2.5
Expenses.....	546,186.28	534,534.21	I. 11,652.07	2.2
Net earnings.....	\$92,890.26	\$111,788.57	D. \$18,898.31	16.9
Gross earn. per mile.....	6,846.40	7,025.25	D. 178.85	2.6
Net.....	1,009.68	1,215.09	D. 205.41	16.9
Per cent. of exps.....	85.40	82.70	I. 2.70	4.4

The earnings and expenses were divided between the two lines as follows:

	Washington line.	Pope's Creek line.	Total.
Gross earnings.....	\$630,076.54	\$38,862.29	\$668,938.83
Expenses.....	476,141.53	70,044.75	546,186.28

Net, or deficit.....	\$124,072.72	Def. \$31,182.46	\$92,890.26
Gross earn. per mile.....	13,958.47	793.11	6,046.49
Net.....	2,885.41	.....	1,009.68
Per cent. of exps.....	79.33	180.24	85.40

The average cost of transportation over the company's lines last year was as follows:

	Wash. line.	Pope's Cr. line.	Average.
Per passenger per mile.....	2,824 cts.	6,812 cts.	2,983 cts.
Per ton per mile.....	2,416 "	7,615 "	2,807 "

The general average cost per passenger per mile showed a decrease of 0.210 cent, and per ton per mile a decrease of 0.048 cent, as compared with 1877.

President Bowie's report says: "The increased expenses on the Pope's Creek line were occasioned by extensive track repairs; by the construction of a pile pier 675 feet long at the creek running out into the Potomac River; by an increase of agencies, it having been decided that the second-class agencies could not be legally maintained, and by an increase of motive power. It will be noted that the report is for the calendar year of 1878, it having been deemed advisable several years ago in consequence of the impossibility of making up the May returns for the annual meeting so early in June to base the annual reports upon the operations of the previous calendar year. It is, therefore, in view of the slightly decreased receipts of 1878, very gratifying to state that the earnings over both the Washington and Pope's Creek lines for the first four months of this year are largely in excess of those for the corresponding months of last year. While, too, the expenses of the Pope's Creek line are in excess of the receipts, because of unusually heavy outlays for maintenance of way and of cars, it has been a profitable feeder to the Washington line from Bowie to both Baltimore and Washington, in passengers, and to Baltimore in freight. * * * We believe the road never was in as good condition. It is gratifying to state that the operations of the road during the whole year were free from serious accident or detention to trains, for which great credit is given the officers and employees of the transportation department, and it is a further agreeable duty to acknowledge the efficiency and courtesy of our different officers and employees generally in their respective duties and positions."

Chesapeake & Ohio Canal.

This canal extends from Cumberland, Md., to the Potomac River at Georgetown, D. C., 184½ miles, with an extension from Georgetown to Alexandria, 7 miles. Almost its entire business is the carriage of coal from the Cumberland Region. A controlling interest is owned by the state of Maryland, and most of the rest of the stock is held by the cities of Washington and Georgetown and the United States.

For the year ending Dec. 31 the tonnage carried was as follows:

	1878.	1877.	Increase.	P. c.
Cumberland to tide-water.....	504,241	.....	.....	.....
Cumberland to Williamsport.....	33,121	.....	.....	.....
Between other points.....	2,928	.....	.....	.....
Total.....	630,290	603,006	27,194	4.5

The tolls charged were 36 cents per ton from Cumberland to tide-water; in 1877 they were as low as 25 cents, the increase being due to settlement of difficulties with the Baltimore & Ohio road and the state, enabling the managers to fix a uniform rate. This settlement much improves the position of the canal, and it is expected to do much better as the coal trade improves.

The income account is as follows:

Balance, cash, Jan. 1.....	\$14,968.86
Tolls, wharfage and trimming.....	\$275,588.67
Rents received.....	9,310.57
Repair bonds sold at par.....	77,000.00
Temporary loans.....	60,000.00
Total.....	\$438,868.10
Salaries and ordinary expenses.....	\$178,525.63
Wharfage, lands bought, interest paid.....	55,444.44
Repairs of damage by freshet.....	161,732.70
Total.....	395,702.86
Balance, Jan. 1, 1879.....	\$43,145.24

The total receipts from the canal showed an increase of \$58,733.03, or 26 per cent, over 1877; actual net earnings of the canal were \$82,525.44.

The report recommends certain improvements in the canal to reduce still further the cost of carrying coal to tide-water. In 1872 tolls and freight on a ton of coal from Cumberland to Georgetown were \$2.24; last year they were \$1.35, a reduction of 40 per cent. With present prices of coal it is not possible to increase the tolls now charged, and the low point at which these are fixed reduces net revenue. Only very economical management makes the net earnings as large as they were last year.

As shown above, a large outlay has been needed to repair the damages done by the great freshets of